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Monthly Energy Review

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Part 1

Overview

Energy production in the United States during August totaled 4.994 quadrillion Btu, up 5.3 percent from the previous month. The bulk of the increase was due to a 23.8-percent rise in coal output, as production began to return to normal following the wildcat miners' strike. There were no notable changes in the production levels of the other major energy sources compared with the previous month. During the period January through August, average daily domestic energy output was 1.0 percent below the level for the corresponding months in 1975 and 4.3 percent below the level for the same period in 1974.

Following 2 months of record high levels, imports of fossil fuels dropped 3.5 percent during August to an average of 41.5 quadrillion Btu per day (the equivalent of 7.2 million barrels per day of crude oil). Imports during the first 8 months of 1976 were 12.6 percent greater than the import level during the comparable period in 1975 and 9.8 percent greater than the same months in 1974. Over the past several years, refiner/marketers have met an increasingly greater share of their import requirements with crude oil rather than refined products. Crude oil accounted for 50.5 percent of the total fossil fuels imported during the period January through August 1974. That share grew to 70.0 percent during the first 8 months of this year. Refined product imports, on the other hand, declined during the same period from 42.4 percent of the total to 23.4 percent. Natural gas imports showed no significant fluctuations over the 2-year period.

The 2-year decline in domestic consumption of primary energy between 1973 and 1975 appears to have reversed in 1976. During the first 7 months of the year, the United States consumed 2.1 percent more energy than during the same months last year. Leading the increase was a 6.1-percent growth in average daily coal consumption, reflecting substantially greater usage of this fuel by utilities for electric power generation. Refined product consumption was also higher (by 3.2 percent) as was nuclear electric power consumption (up 3.3 percent). Both consumption of natural gas and hydroelectric power were lower (by 1.4 percent and 3.4 percent, respectively).

Inventories of crude oil and the major refined products at the end of August were well above minimum operating levels and generally compared favorably with stock levels reported at the end of August 1975. The following percentage changes were noted: crude oil, +8.6; motor gasoline, +6.4; jet fuel, +1.3; distillate fuel oil, +5.3; residual fuel oil, -6.6.

Electric power production in August declined 1 billion kilowatt hours from a seasonal peak in July of 185.7 billion kilowatt hours. Electricity output for the first 8 months of the year was 5.3 percent greater than the level for the same period in 1975. This rise in output level represents a significant departure from the previous 2 years when electric power production rose a total of only 2.7 percent.

The national average selling price of regular gasoline at full service outlets increased 0.5 cent during August to 60.1 cents per gallon, the first time that it has ever exceeded 60 cents per gallon. Dealer margins remained at 7.4 cents per gallon for the fourth month in a row. The revised average "upper tier" crude oil price for June was $11.60 per barrel. Upper tier crude prices will be frozen at this level until the end of November. "Lower tier" crude prices on the other hand, rose an average of 4 cents in July to $5.19 per barrel. The domestic average crude oil price was $8.04 per barrel, up 5 cents from June.

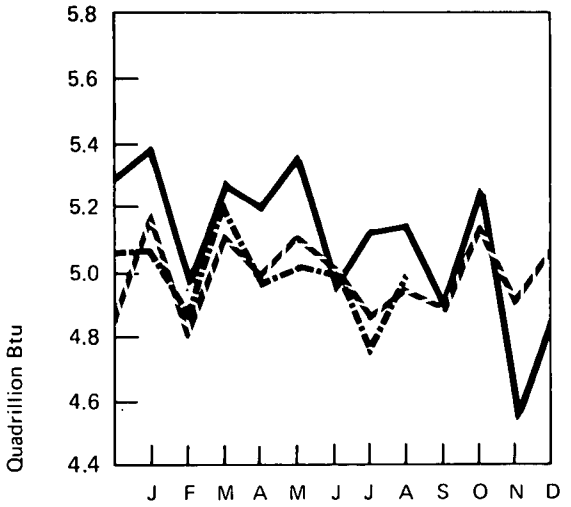
Oil and gas exploration remained high in August. The number of rotary drilling rigs in operation increased by 94 during the month reaching 1,691, the highest August level in 14 years. August well completions were up 5.3 percent over July and were 4.5 percent greater than the level for August 1975. The number of seismic crews engaged in petroleum exploration increased by 1.9 percent during the month but were still 4.8 percent below the number at work during August 1975.

World crude oil production averaged 56.4 million barrels per day in July, a drop of 450,000 barrels per day from June. Arab members of the Organization of Petroleum Exporting Countries accounted for 32.1 percent of the world total.

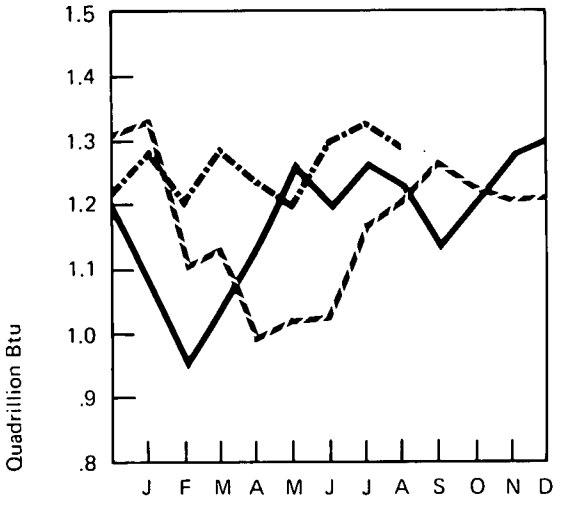
		Domestic Production of Energy*	Imports of Fossil Fuels**	Domestic Consumption of Energy***
			Quadrillion (10^{15}) Btu	
1974	January	R5.393	1.072	R6.796
	February	R4.979	0.945	R6.205
	March	R5.294	1.053	R6.264
	April	R5.199	1.142	R5.759
	May	R5.374	1.266	R5.754
	June	R4.945	1.197	R5.535
	July	R5.141	1.266	R5.867
	August	R5.157	1.237	R5.900
	September	R5.000	1.138	R5.597
	October	R5.264	1.210	R6.066
	November	R4.542	1.284	R6.128
	December	R4.849	1.305	R6.732
	TOTAL	**R61.135**	**14.114**	**R72.602**
1975	January	R5.194	1.330	R6.955
	February	R4.805	1.093	R6.108
	March	R5.130	1.128	R6.297
	April	R4.998	0.970	R5.704
	May	R5.123	1.023	R5.384
	June	R5.016	1.028	R5.344
	July	R4.862	1.169	R5.581
	August	R4.954	1.213	R5.655
	September	R4.897	1.273	R5.413
	October	5.155	1.226	R5.825
	November	R4.894	1.200	R5.767
	December	R5.067	1.219	R6.819
	TOTAL	**R60.094**	**13.870**	**R70.852**
1976	January	5.069	1.286	R7.217
	February	R4.850	1.195	R6.161
	March	5.212	1.290	R6.396
	April	R4.955	R1.232	R5.740
	May	R†5.032	R†1.196	R†5.636
	June	R†4.997	R†1.301	R†5.554
	July	R†4.741	R†1.334	†5.731
	August	†4.994	†1.287	NA
	TOTAL	**39.851** (8 months)	**10.120** (8 months)	**42.435** (7 months)

*See Explanatory Note 1.
**See Explanatory Note 2.
***See Explanatory Note 3.
†Preliminary data.
R=Revised data.
Note: Most of the revisions indicated for 1974 and 1975 are minor.

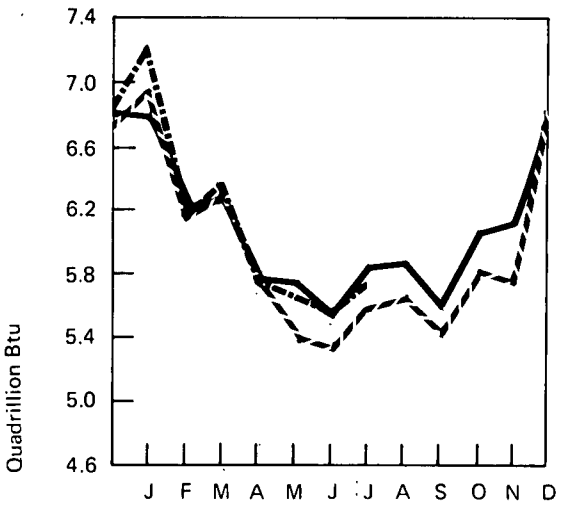
Domestic Production of Energy



Imports of Fossil Fuels



Domestic Consumption of Energy



Part 2

Crude Oil and Refined Petroleum Products

Crude Oil and Refined Petroleum Products

Crude oil production averaged 8.16 million barrels per day in August, about the same as during the previous month. Crude oil input to refineries continued high (13.69 million barrels per day), about 0.60 million barrels per day more than in August 1975. Crude oil inventories of 278.8 million barrels were adequate for commercial purposes and were equal to 20.4 days of crude oil input to refineries.

For the third consecutive month, crude oil imports were over 5.50 million barrels per day. For the first 8 months of 1976, imports of crude oil averaged 5.01 million barrels per day.

Total petroleum imports amounted to 6.69 million barrels per day in August. Major sources and their respective shares were: Saudi Arabia, 20 percent; Nigeria, 16 percent; Venezuela, 11 percent; and Indonesia, 9 percent. Nearly 78 percent of petroleum imports came directly from OPEC countries.

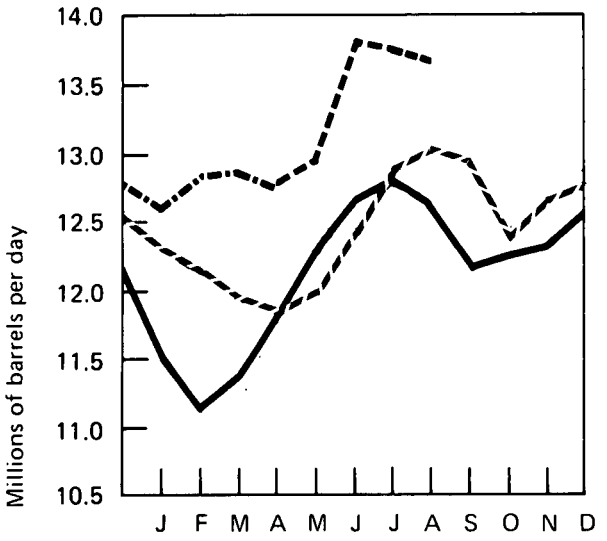
Daily average demand for refined petroleum products was 16.03 million barrels per day in August. During the first 8 months of 1976, demand averaged 3.0 percent higher than that during the first 8 months in 1975. August demand for distillate fuel oil was up 0.10 million barrels per day from July, probably indicating an early inventory accumulation at secondary and consumer storage facilities.

Crude Oil

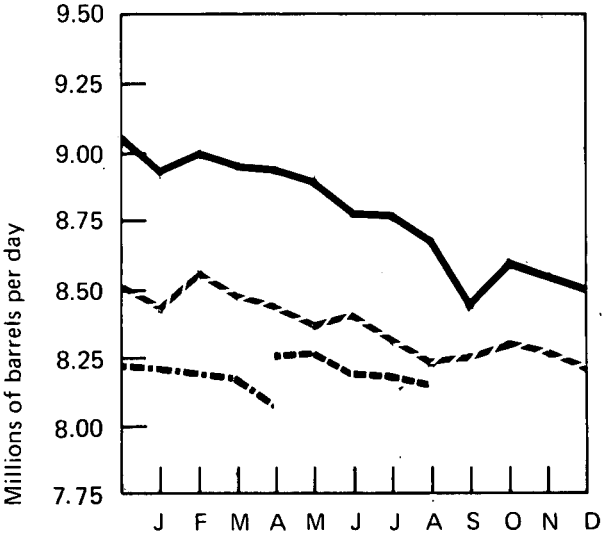
		Crude Input to Refineries		Domestic Production		Imports		Stocks	
		Thousands of barrels per day						Thousands of barrels	
		BOM	API	BOM	API	BOM	API	BOM	API
1974	January	11,491		8,934		2,382		233,035	
	February	11,102		9,142		2,248		240,723	
	March	11,355		8,965		2,462		244,665	
	April	11,823		8,954		3,267		256,385	
	May	12,333		8,911		3,908		269,455	
	June	12,697		8,780		3,925		268,765	
	July	12,811		8,780		4,091		268,686	
	August	12,644		8,699		3,924		264,840	
	September	12,124		8,443		3,797		266,726	
	October	12,286		8,611		3,810		269,437	
	November	12,332		8,569		3,958		271,144	
	December	12,519		8,527		3,869		265,020	
	AVERAGE	**12,133**		**8,774**		**3,477**			
1975	January	12,297		8,439		4,029		270,462	
	February	12,135		8,575		3,828		276,755	
	March	11,905		8,476		3,656		279,989	
	April	11,803		8,440		3,378		284,990	
	May	11,983		8,371		3,486		276,110	
	June	12,417		8,409		3,905		276,132	
	July	12,915		8,327		4,193		264,157	
	August	13,046		8,237		4,581		256,616	
	September	12,945		8,266		4,689		259,446	
	October	12,365		8,310		4,389		269,584	
	November	12,689		8,271		4,623		270,950	
	December	12,779		8,239		4,476		271,354	
	AVERAGE	**12,442**		**8,362**		**4,105**			
1976	January	12,560		8,211		4,595		298,296	
	February	12,834		8,196		4,208		277,414	
	March	12,877		8,175		4,738		283,112	
	April	12,727	12,791	8,080	8,265	4,790	5,000	286,628	279,134
	May		12,911		8,274		4,851		282,523
	June		13,828		8,191		5,679		281,698
	July		13,788		8,190		5,625		281,576
	August		13,689		8,165		5,525		278,801
	AVERAGE* (8 months)		**13,153**		**8,183**		**5,006**		

*Eight-month average is based on Bureau of Mines data for January through April and American Petroleum Institute data for May through August.
Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

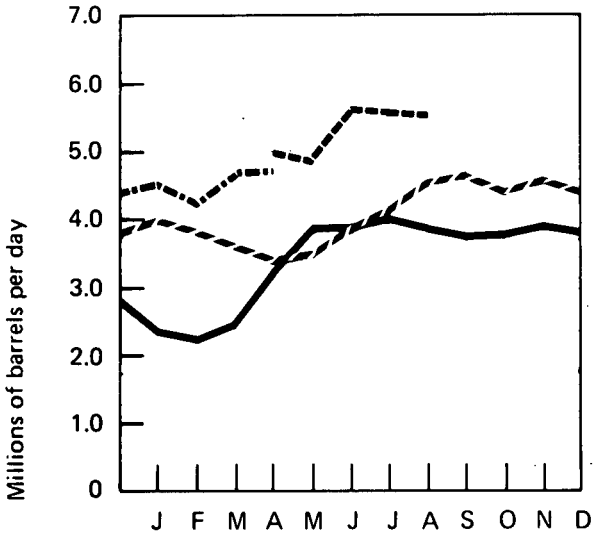
Crude Input to Refineries



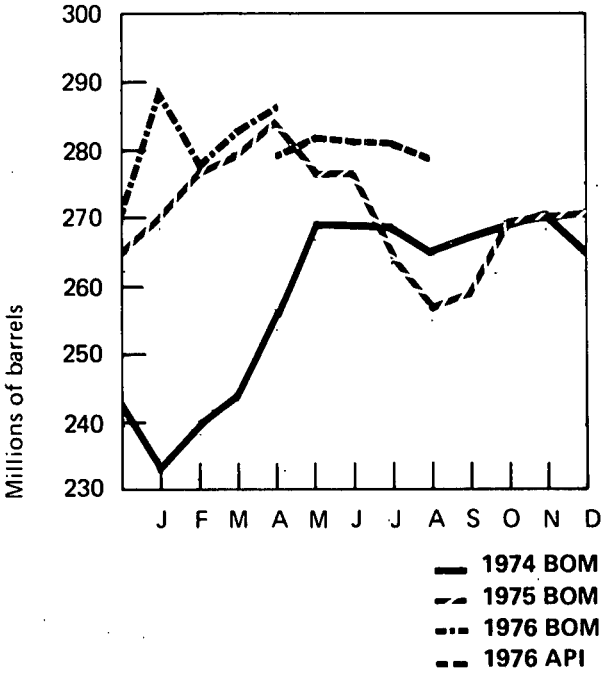
Domestic Production



Imports



Stocks



Total Refined Petroleum Products

Total Petroleum Imports

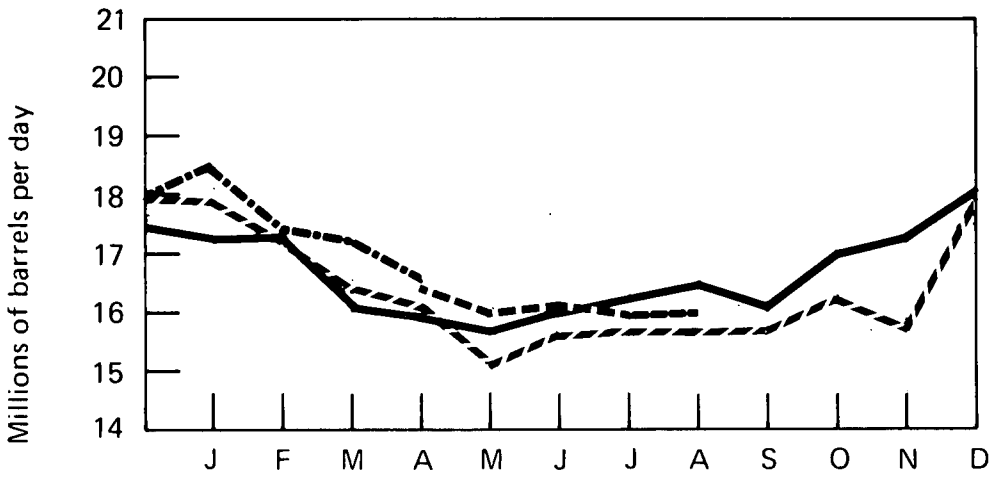
		Domestic Demand		Imports*			
		Thousands of barrels per day				Thousands of barrels per day	
		BOM	API	BOM	API	BOM	API
1974	January	17,286		2,989		5,371	
	February	17,366		2,968		5,216	
	March	16,104		2,812		5,274	
	April	15,929		2,713		5,980	
	May	15,726		2,586		6,494	
	June	16,117		2,435		6,360	
	July	16,349		2,445		6,536	
	August	16,550		2,438		6,362	
	September	16,024		2,255		6,052	
	October	17,050		2,366		6,176	
	November	17,351		2,840		6,798	
	December	18,013		2,798		6,667	
	AVERAGE	**16,653**		**2,635**		**6,112**	
1975	January	17,983		2,811		6,840	
	February	17,248		2,348		6,176	
	March	16,316		2,074		5,730	
	April	16,041		1,655		5,033	
	May	15,118		1,690		5,176	
	June	15,611		1,502		5,407	
	July	15,762		1,789		5,982	
	August	15,767		1,681		6,262	
	September	15,769		2,116		6,805	
	October	16,344		1,907		6,296	
	November	15,721		1,739		6,362	
	December	17,987		1,751		6,227	
	AVERAGE	**16,291**		**1,920**		**6,025**	
1976	January	18,543		2,016		6,611	
	February	17,341		2,335		6,543	
	March	17,239		1,885		6,623	
	April	16,597	16,357	1,731	1,553	6,521	6,553
	May		15,935		1,282		6,133
	June		16,077		1,281		6,960
	July		15,911		1,286		6,911
	August		16,031		1,162		6,687
	AVERAGE** (8 months)		**16,707**		**1,617**		**6,623**

*See definitions.

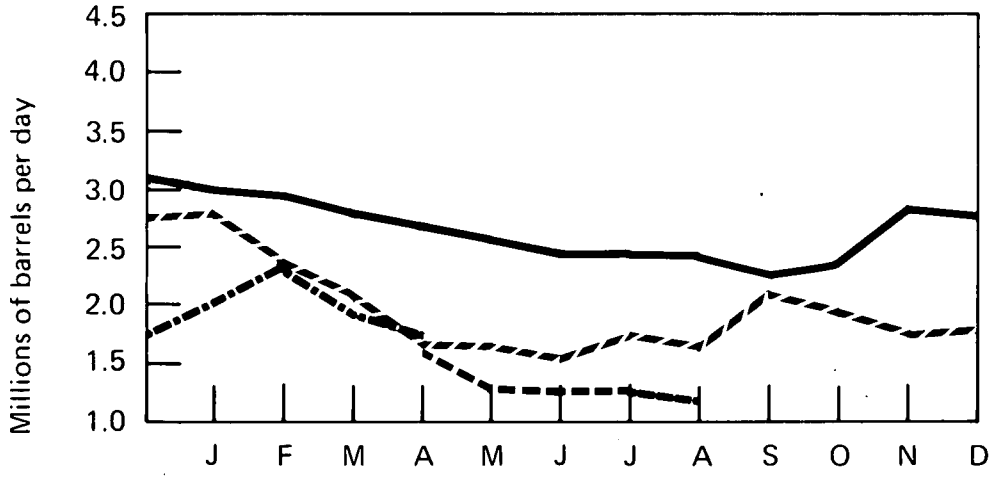
**Eight-month average is based on Bureau of Mines data for January through April and American Petroleum Institute data for May through August.

Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

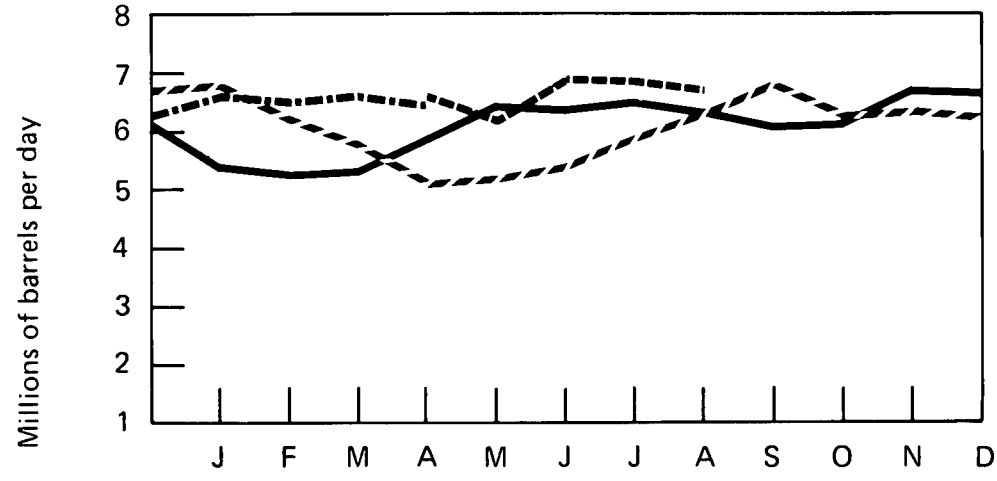
Total Refined Product Domestic Demand



Refined Product Imports



Total Petroleum Imports



— 1974 BOM
-·- 1975 BOM
-··- 1976 BOM
– – 1976 API

Motor Gasoline

		Domestic Demand		Production*		Imports		Stocks*	
		Thousands of barrels per day						Thousands of barrels	
		BOM	API	BOM	API	BOM	API	BOM	API
1974	January	5,804		5,900		163		217,463	
	February	6,100		5,969		184		219,058	
	March	6,162		5,982		225		220,307	
	April	6,457		6,311		260		223,752	
	May	6,745		6,329		250		218,670	
	June	6,919		6,663		211		217,381	
	July	6,959		6,793		212		218,838	
	August	7,061		6,815		253		218,951	
	September	6,388		6,453		202		227,031	
	October	6,712		6,336		171		220,748	
	November	6,547		6,292		174		218,385	
	December	6,558		6,419		141		224,719	
	AVERAGE	**6,537**		**6,358**		**204**			
1975	January	6,206		6,509		262		242,285	
	February	6,096		6,276		171		251,915	
	March	6,326		6,070		150		248,685	
	April	6,718		6,046		133		232,556	
	May	6,871		6,126		142		213,947	
	June	7,076		6,669		177		207,114	
	July	7,041		7,003		209		212,454	
	August	7,008		6,872		232		215,480	
	September	6,729		6,822		269		226,447	
	October	6,778		6,409		207		221,493	
	November	6,389		6,602		139		232,091	
	December	6,808		6,786		119		234,925	
	AVERAGE	**6,674**		**6,518**		**184**			
1976	January	6,398		6,483		92		240,464	
	February	6,263		6,472		84		248,854	
	March	6,890		6,455		123		239,049	
	April	7,159	7,144	6,562	6,596	99	112	223,965	225,160
	May		7,114		6,798		110		218,545
	June		7,280		7,295		87		221,654
	July		7,226		7,217		107		224,690
	August		7,071		7,115		104		229,187
	AVERAGE** (8 months)		**6,928**		**6,801**		**101**		

*See definitions.

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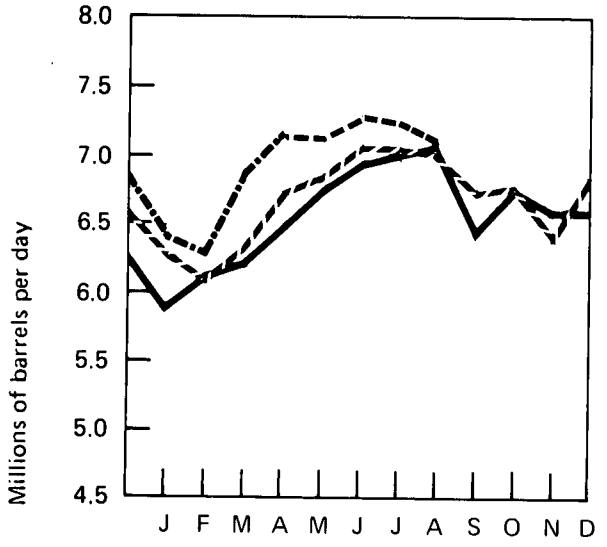
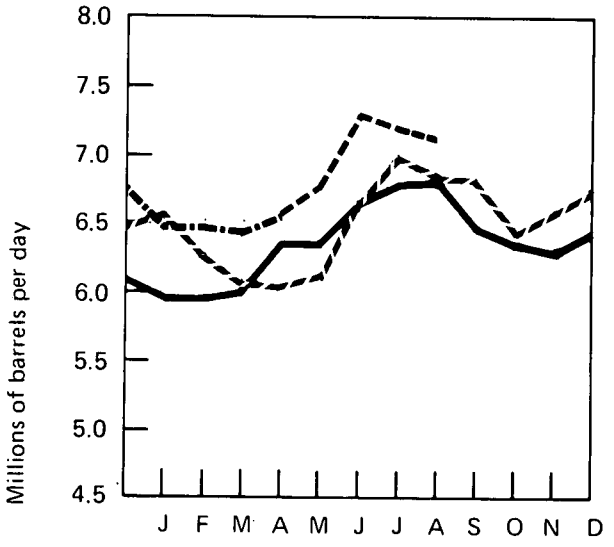
Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

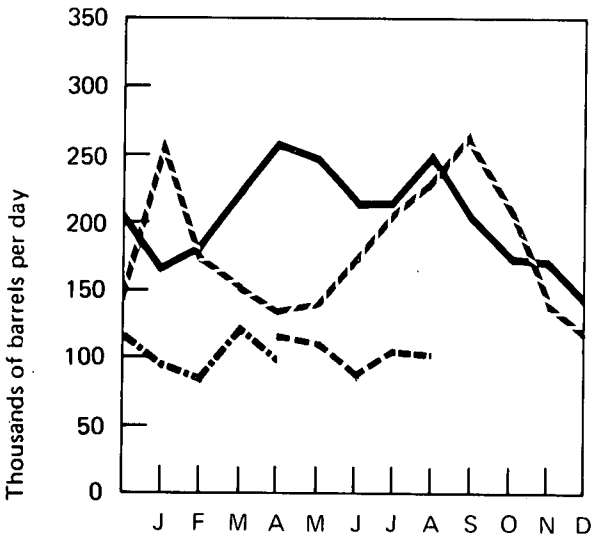
Domestic Demand



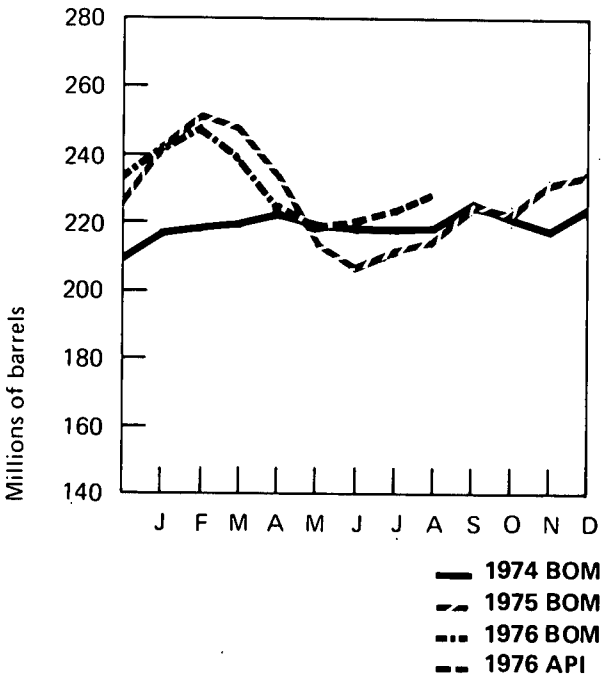
Production



Imports



Stocks



Jet Fuel

		Domestic Demand		Production		Imports		Stocks	
		Thousands of barrels per day						Thousands of barrels	
		BOM	API	BOM	API	BOM	API	BOM	API
1974	January	895		800		136		29,732	
	February	860		783		75		29,617	
	March	956		832		139		29,996	
	April	941		868		132		31,725	
	May	1,053		868		205		32,324	
	June	952		810		141		32,200	
	July	1,028		802		214		31,671	
	August	1,031		805		206		30,989	
	September	1,109		867		217		30,186	
	October	1,011		868		161		30,564	
	November	1,032		863		140		29,616	
	December	1,043		861		178		29,776	
	AVERAGE	**993**		**836**		**163**			
1975	January	1,041		831		229		30,321	
	February	1,075		835		200		29,133	
	March	982		896		130		30,456	
	April	1,006		864		138		30,263	
	May	977		861		133		30,719	
	June	989		839		106		29,337	
	July	954		883		88		29,798	
	August	1,046		958		132		31,103	
	September	1,040		907		140		31,291	
	October	997		863		106		30,410	
	November	999		864		89		28,977	
	December	911		849		109		30,380	
	AVERAGE	**1,001**		**871**		**133**			
1976	January	948		889		69		30,618	
	February	966		918		72		31,180	
	March	965		927		86		32,619	
	April	1,010	965	927	935	108	95	33,332	31,717
	May		1,001		902		96		31,540
	June		980		913		100		32,459
	July		1,092		953		78		31,118
	August		990		948		59		31,500
	AVERAGE* (8 months)		**994**		**922**		**83**		

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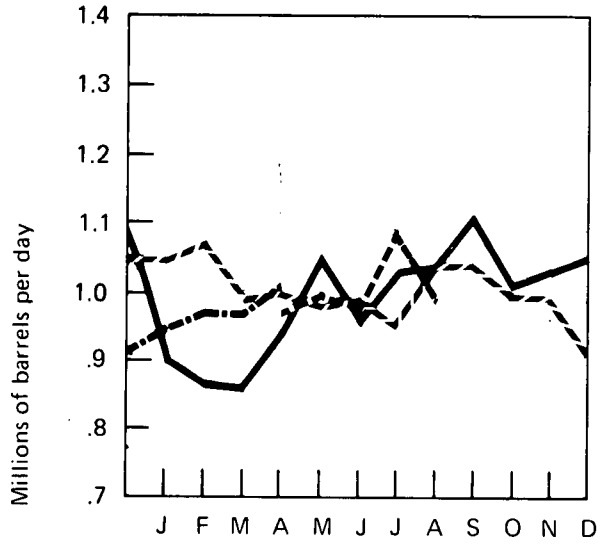
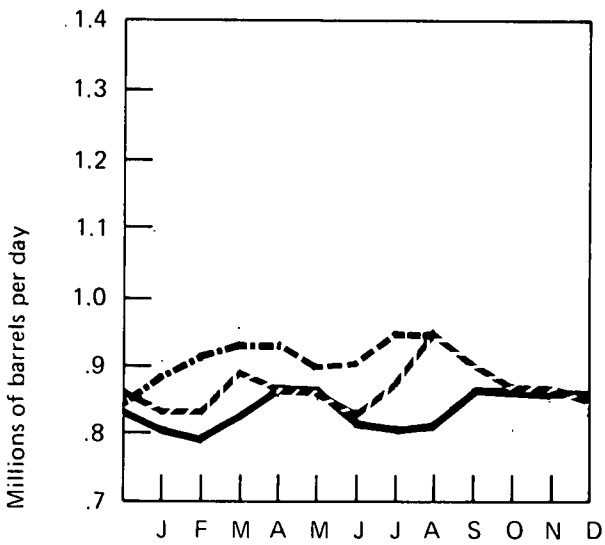
Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

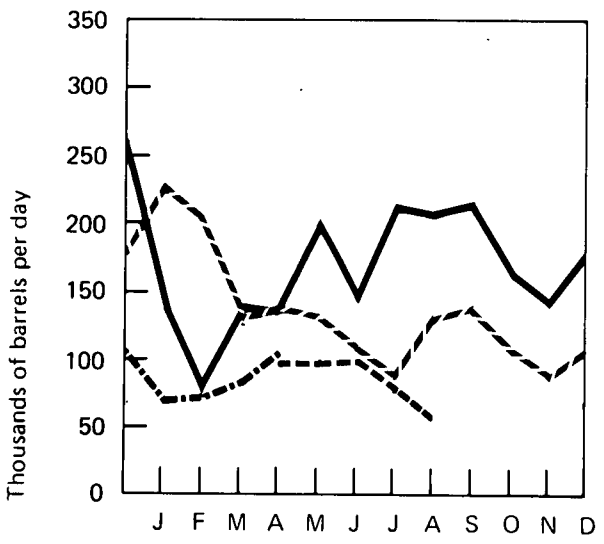
Domestic Demand



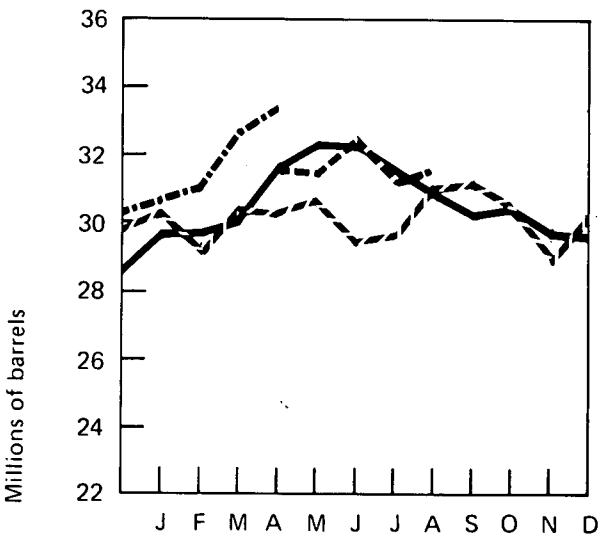
Production



Imports



Stocks



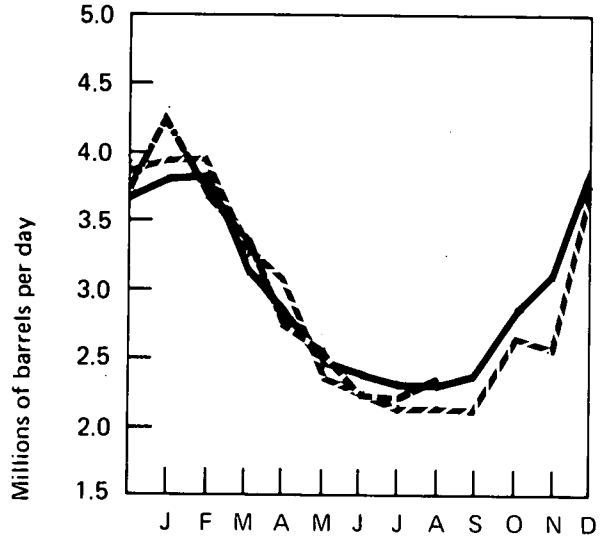
1974 BOM
1975 BOM
1976 BOM
1976 API

Distillate Fuel Oil

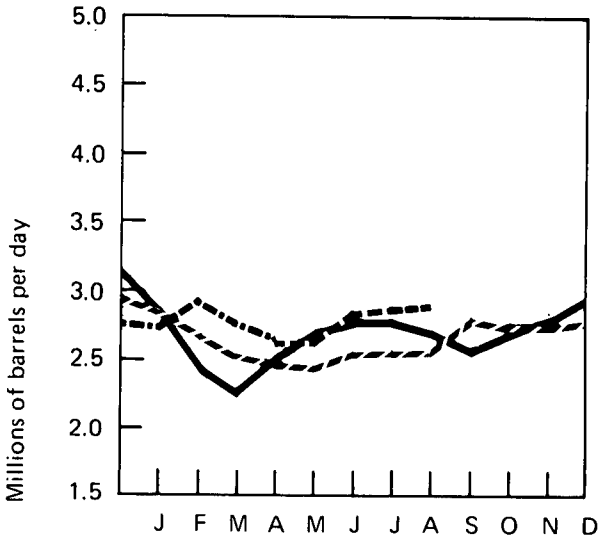
		Domestic Demand		Production*		Imports		Stocks*	
		Thousands of barrels per day						Thousands of barrels	
		BOM	API	BOM	API	BOM	API	BOM	API
1974	January	3,835		2,880		464		181,179	
	February	3,849		2,399		306		149,125	
	March	3,164		2,226		287		128,822	
	April	2,852		2,522		220		125,553	
	May	2,450		2,704		268		141,806	
	June	2,377		2,783		220		160,645	
	July	2,309		2,792		221		182,458	
	August	2,309		2,705		125		198,673	
	September	2,385		2,552		152		208,269	
	October	2,887		2,700		237		209,908	
	November	3,157		2,801		454		212,875	
	December	3,853		2,924		515		223,717	
	AVERAGE	**2,948**		**2,668**		**289**			
1975	January	3,953		2,852		324		199,715	
	February	3,967		2,679		302		176,696	
	March	3,293		2,531		256		161,111	
	April	3,094		2,486		110		146,214	
	May	2,382		2,431		136		152,027	
	June	2,266		2,574		68		163,306	
	July	2,112		2,589		106		181,472	
	August	2,173		2,592		92		197,323	
	September	2,163		2,812		129		220,732	
	October	2,675		2,744		103		226,113	
	November	2,544		2,767		96		235,749	
	December	3,778		2,783		124		208,787	
	AVERAGE	**2,849**		**2,653**		**153**			
1976	January	4,296		2,734		162		165,428	
	February	3,675		2,961		195		150,439	
	March	3,333		2,793		148		138,306	
	April	2,788	2,707	2,655	2,617	96	90	137,249	144,032
	May		2,588		2,622		75		147,387
	June		2,267		2,856		48		166,474
	July		2,224		2,895		52		188,953
	August		2,354		2,900		58		207,757
	AVERAGE** (8 months)		**2,938**		**2,801**		**104**		

*See definitions.
**Eight-month average is based on Bureau of Mines data for January through April and American Petroleum Institute data for May through August.
Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

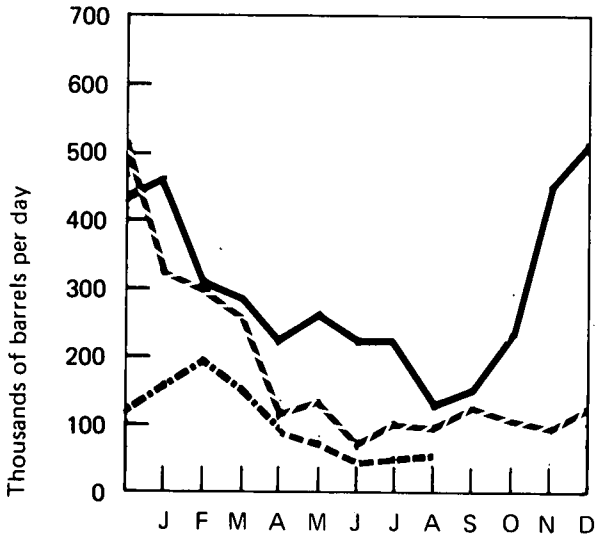
Domestic Demand



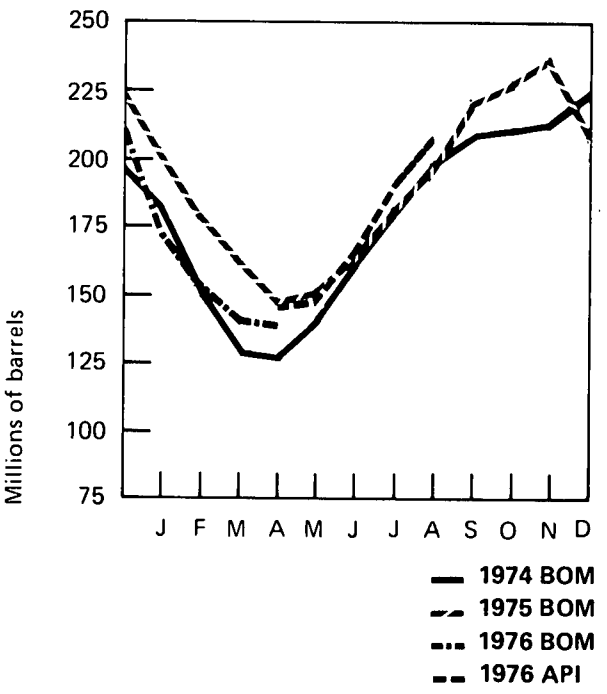
Production



Imports



Stocks

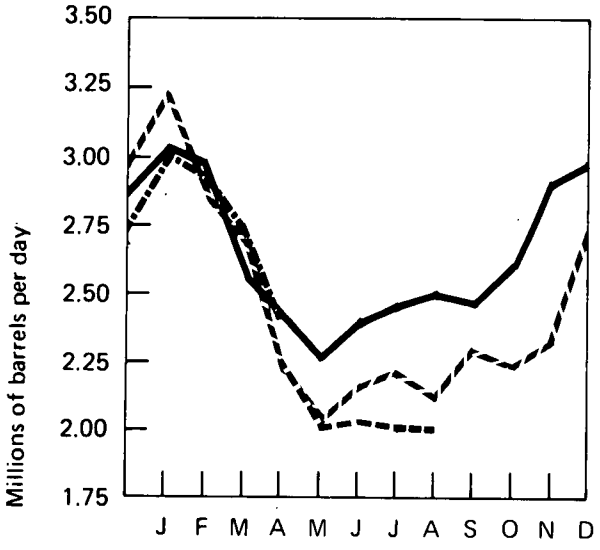


Residual Fuel Oil

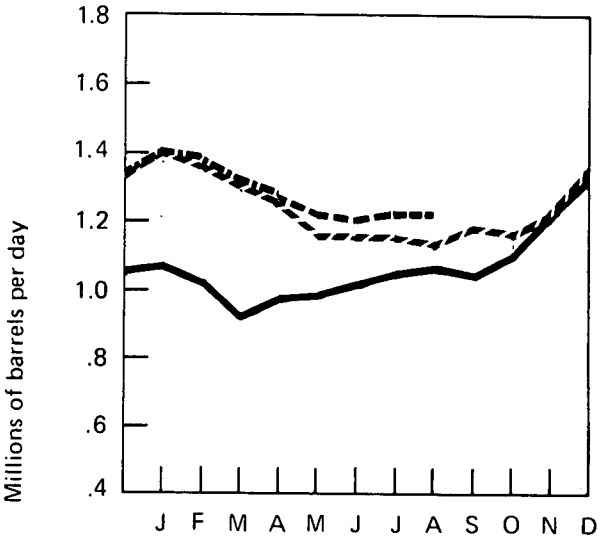
		Domestic Demand		Production		Imports		Stocks	
		Thousands of barrels per day						Thousands of barrels	
		BOM	API	BOM	API	BOM	API	BOM	API
1974	January	3,035		1,072		1,733		46,548	
	February	2,991		1,029		1,904		45,004	
	March	2,556		912		1,713		47,222	
	April	2,437		985		1,593		51,339	
	May	2,260		995		1,362		54,356	
	June	2,405		1,026		1,500		57,891	
	July	2,473		1,056		1,474		59,787	
	August	2,529		1,067		1,520		60,988	
	September	2,475		1,032		1,421		60,251	
	October	2,611		1,099		1,465		58,679	
	November	2,935		1,229		1,753		60,363	
	December	2,983		1,335		1,630		74,939	
	AVERAGE	**2,639**		**1,070**		**1,587**			
1975	January	3,242		1,415		1,647		60,233	
	February	2,849		1,354		1,402		66,495	
	March	2,668		1,299		1,292		64,148	
	April	2,225		1,245		1,047		66,340	
	May	2,049		1,151		1,123		73,498	
	June	2,179		1,152		904		69,660	
	July	2,239		1,155		1,144		71,526	
	August	2,118		1,146		982		71,857	
	September	2,329		1,183		1,312		76,938	
	October	2,238		1,165		1,221		81,858	
	November	2,349		1,214		1,169		83,131	
	December	2,728		1,354		1,099		74,126	
	AVERAGE	**2,433**		**1,235**		**1,194**			
1976	January	3,016		1,415		1,353		66,592	
	February	2,929		1,394		1,626		68,859	
	March	2,722		1,311		1,285		65,132	
	April	2,421	2,226	1,283	1,273	1,183	969	66,458	66,870
	May		2,004		1,224		802		66,627
	June		2,045		1,201		872		67,150
	July		2,024		1,229		841		68,609
	August		2,022		1,226		759		67,111
	AVERAGE* (8 months)		**2,395**		**1,285**		**1,086**		

*Eight-month average is based on Bureau of Mines data for January through April and American Petroleum Institute data for May through August.
Sources: Bureau of Mines (BOM) and American Petroleum Institute (API) as indicated.

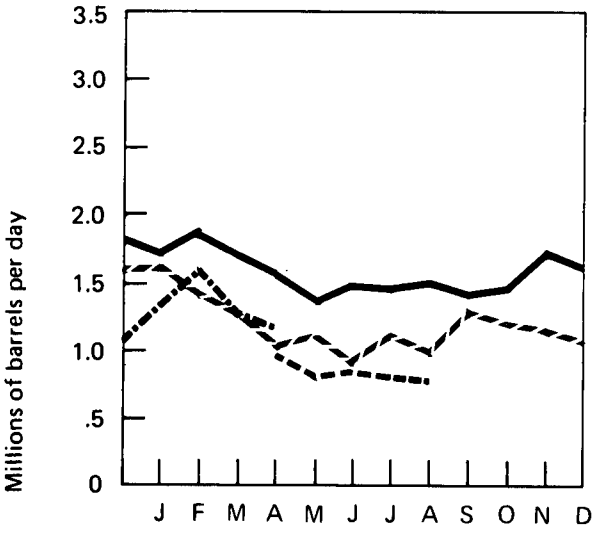
Domestic Demand



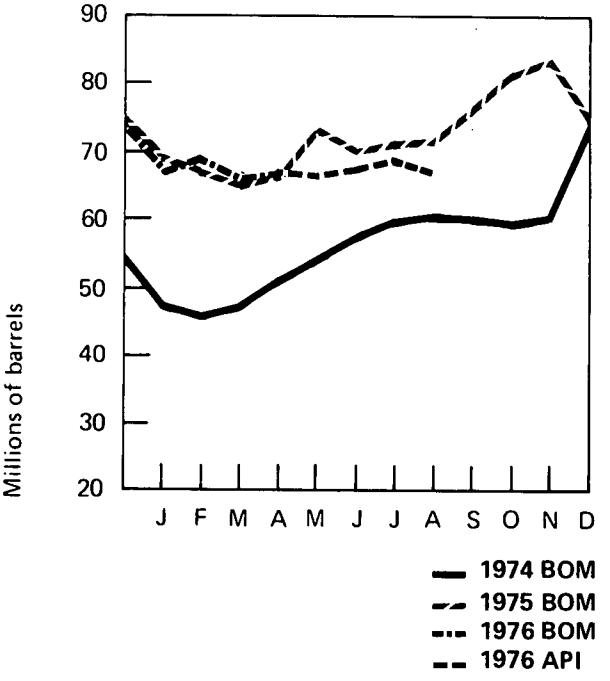
Production



Imports



Stocks

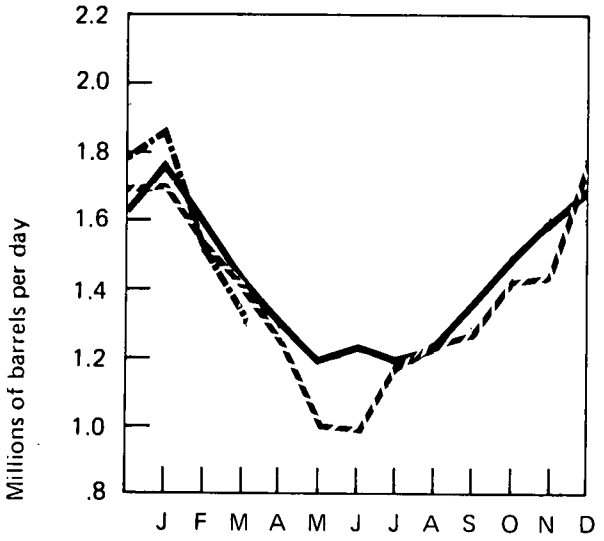


Natural Gas Liquids

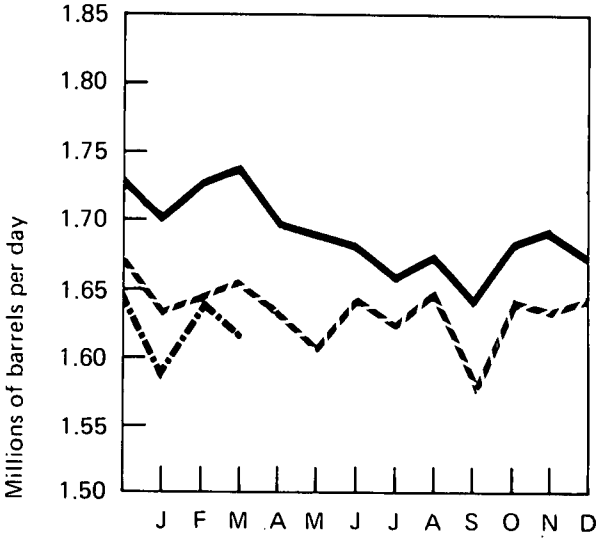
		Domestic Demand*	Production*		Used at Refineries*	Imports	Stocks*
			At processing plants	At refineries			
			Thousands of barrels per day				Thousands of barrels
1974	January	1,778	1,699	327	794	304	91,210
	February	1,593	1,728	337	777	294	90,145
	March	1,408	1,741	341	720	224	94,817
	April	1,321	1,696	353	690	215	101,352
	May	1,180	1,690	340	678	182	110,881
	June	1,242	1,684	368	718	199	117,915
	July	1,187	1,657	364	723	163	125,427
	August	1,221	1,676	361	742	163	131,675
	September	1,360	1,638	348	738	166	133,215
	October	1,493	1,686	330	788	200	130,557
	November	1,604	1,694	301	795	208	124,447
	December	1,692	1,670	286	796	230	114,295
	AVERAGE	**1,422**	**1,688**	**338**	**746**	**212**	
1975	January	1,708	1,630	307	756	257	105,400
	February	1,512	1,646	296	734	181	100,945
	March	1,404	1,658	280	731	178	99,168
	April	1,242	1,635	273	667	176	100,408
	May	1,002	1,607	299	628	97	112,737
	June	998	1,646	323	659	166	125,215
	July	1,191	1,621	336	701	173	131,359
	August	1,227	1,650	357	690	163	137,074
	September	1,278	1,577	326	703	209	140,278
	October	1,429	1,643	310	729	198	138,981
	November	1,444	1,635	309	759	196	135,976
	December	1,787	1,646	310	768	232	124,278
	AVERAGE	**1,352**	**1,633**	**311**	**710**	**186**	
1976	January	1,885	1,585	305	728	240	109,450
	February	1,518	1,640	316	793	270	106,647
	March	1,303	1,615	333	674	194	111,483
	April	1,201	1,616	349	716	171	116,788
	May	1,074	1,588	376	695	144	124,369
	AVERAGE (5 months)	**1,409**	**1,608**	**336**	**716**	**203**	

*See Explanatory Note 4.
Source: Bureau of Mines.

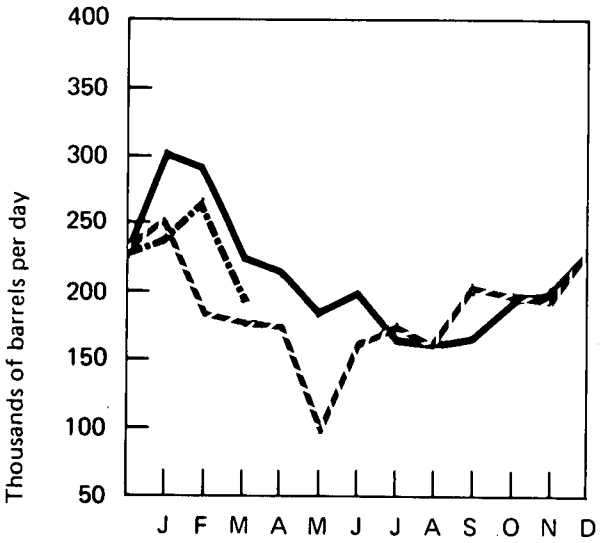
Domestic Demand



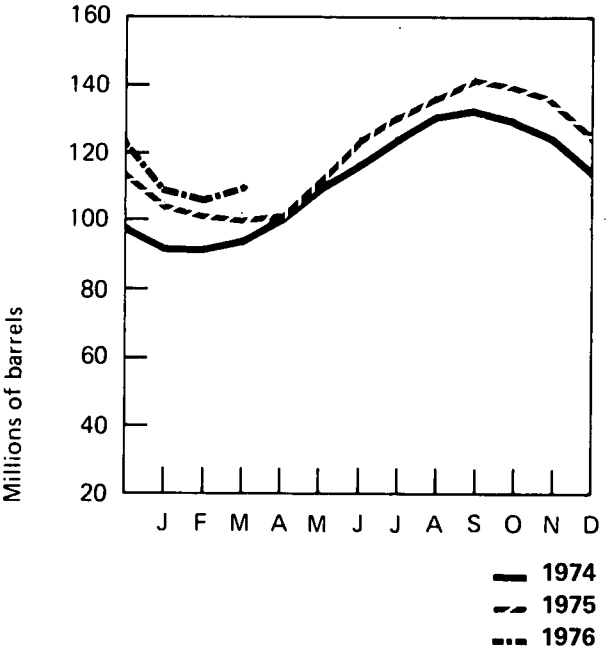
Production at Processing Plants



Imports



Stocks



U.S. Petroleum Supply and Demand—1976

	Actual*		Forecast**	
	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
	Thousands of barrels per day			
Supply				
Crude oil and lease condensate production	8,194	8,183	8,046	7,972
Natural gas plant liquids production	1,612	1,585	1,575	1,592
Other hydrocarbon supply	37	36	36	36
Crude oil imports	4,520	5,104	5,648	5,587
Refined products imports***	2,073	1,430	1,521	2,161
Total new supply	16,436	16,338	16,826	17,348
Processing gain	485	500	479	475
Stock change—all oils	-797	+424	+524	-395
Total net supply	17,718	16,414	16,781	18,218
Demand				
Crude oil and refined products exports	192	200	198	195
Crude oil losses	14	14	13	13
Domestic demand for refined products†	17,715	16,200	16,570	18,010
Total demand	17,921	16,414	16,781	18,218
Unaccounted for crude oil††	-203	0	0	0

*Partially estimated.
**See Explanatory Note 5 for discussion of basic assumptions for forecast.
***Includes plant condensate and unfinished oils.
†Includes international bunkers.
††Balancing item resulting from statistical inconsistencies.
Note: 2nd, 3rd, and 4th Quarter figures have been revised.
Sources: 1st Quarter—BOM; 2nd Quarter—BOM, API, FEA estimates; 3rd and 4th Quarters—FEA forecast.

Part 3 Natural Gas

Natural Gas

Marketed production of natural gas in August was estimated to be 3.4 percent below the volume marketed in August 1975. Estimated production for the first 8 months of 1976 was 2.4 percent below production during the same period of 1975.

Imports of natural gas in August were estimated to be 1.3 percent above the August 1975 level. For the first 8 months of the year, imports were an estimated 3.2 percent above the quantities reported for the comparable period last year.

Estimated consumption of natural gas in August was 2.0 percent below last August's level. For the January through August period, an estimated 1.0 percent less natural gas was consumed than in the same period of 1975.

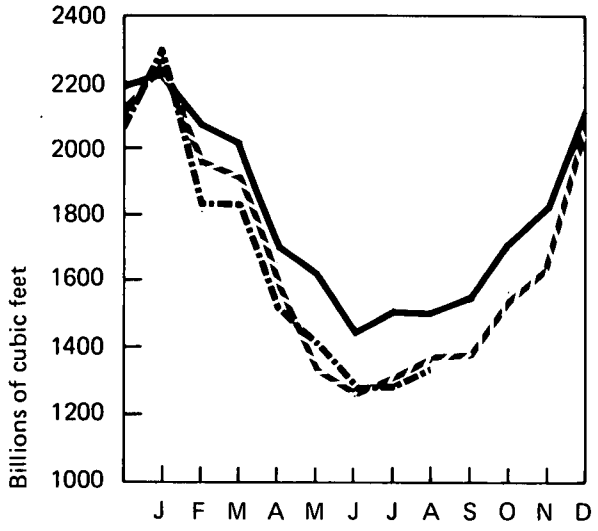
During the first 5 months of 1976, sales of natural gas by domestic producers to major interstate pipelines were 4.9 percent lower than sales during the corresponding period of 1975.

Natural Gas

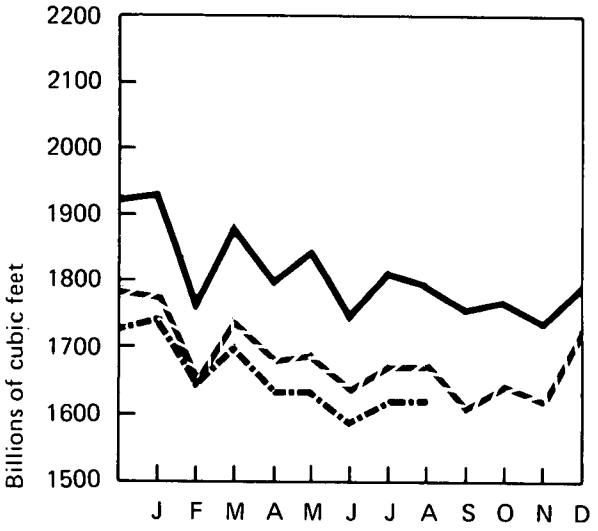
		Domestic Consumption*	Marketed Production*	Domestic Producer Sales to Major Interstate Pipelines	Imports
			Billion cubic feet		
1974	January	2,230	1,928	1,033	86
	February	2,054	1,759	941	79
	March	2,003	1,886	1,027	85
	April	1,691	1,793	987	83
	May	1,608	1,846	981	80
	June	1,439	1,740	928	74
	July	1,514	1,818	947	74
	August	1,510	1,790	932	76
	September	1,537	1,755	870	70
	October	1,706	1,767	936	83
	November	1,827	1,729	921	82
	December	2,104	1,790	959	87
	TOTAL	**21,223**	**21,601**	**11,462**	**959**
1975	January	R2,248	1,778	950	81
	February	R1,939	1,640	867	75
	March	R1,903	1,740	948	83
	April	R1,575	1,677	906	82
	May	R1,331	1,689	898	80
	June	R1,257	1,634	859	76
	July	R1,313	1,677	873	80
	August	R1,369	1,677	882	75
	September	R1,370	1,603	836	74
	October	R1,544	1,646	877	80
	November	R1,640	1,618	853	81
	December	R2,049	1,730	903	86
	TOTAL	**R19,538**	**20,109**	**10,652**	**953**
1976	January	R2,303	1,745	894	83
	February	R1,829	1,641	850	79
	March	R1,829	1,709	894	85
	April	R1,511	1,633	849	85
	May	R1,404	**1,634	860	R83
	June	R1,279	***1,580	NA	R***80
	July	R1,308	***1,620	NA	R***81
	August	1,342	***1,620	NA	***76
	TOTAL (8 months)	**12,805**	**13,182**	**4,347** (5 months)	**652**

*See Explanatory Note 6.
**Preliminary data.
***Projected data.
R=Revised data. NA=Not available.
Note: All monthly Domestic Consumption data are estimated.
Sources: Consumption, Marketed Production, and Imports—Bureau of Mines; Domestic Producer Sales—Federal Power Commission.

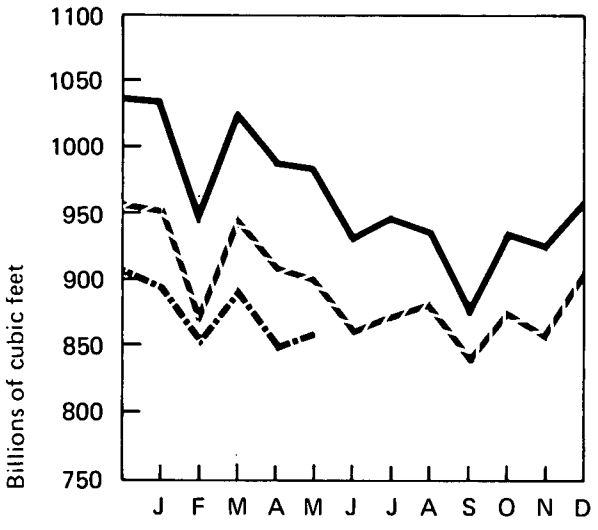
Domestic Consumption



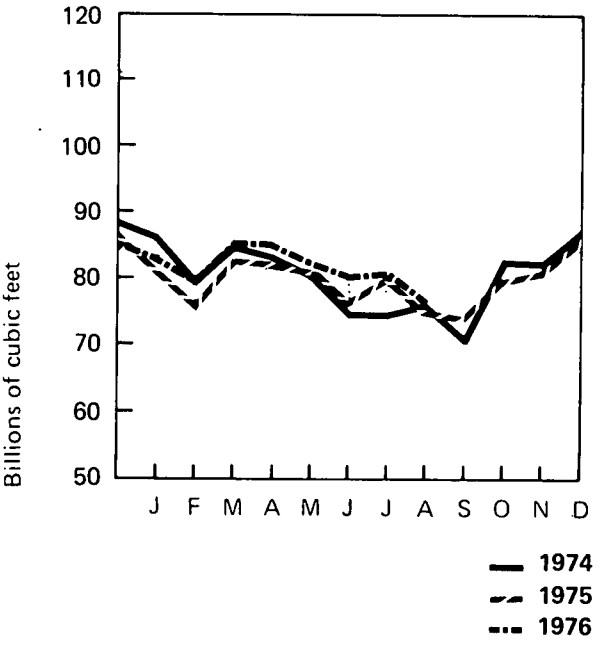
Marketed Production



Domestic Producer Sales to Major Interstate Pipelines



Imports

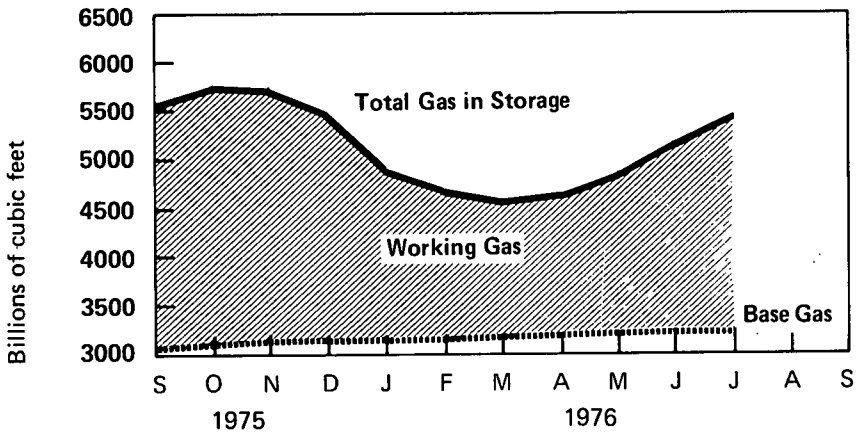


Natural Gas (Continued)

Natural Gas in Underground Storage*

		Total Gas in Storage	Base Gas	Working Gas	Storage Injections	Storage Withdrawals	Net Storage Injections
				Billion cubic feet			
1974	October**	5,445	3,042	2,403	***	***	***
1975	September	5,558	3,084	2,474	232	38	194
	October	5,770	3,128	2,642	185	51	134
	November	5,760	3,172	2,588	99	150	-51
	December	5,423	3,173	2,250	41	394	-353
1976	January	4,868	3,194	1,674	19	630	-611
	February	4,660	3,197	1,463	73	292	-219
	March	4,543	3,195	1,348	85	217	-132
	April	4,650	3,208	1,443	181	68	113
	May	4,878	3,214	1,664	248	23	225
	June	5,163	3,220	1,943	308	19	289
	July	R5,476	R3,244	R2,232	R318	19	R299

Gas in Storage



*See Explanatory Note 7.
**Data reported as of November 1, 1974.
***Between November 1, 1974, and August 31, 1975, a total of 1,658 billion cubic feet of gas was injected into storage and 1,686 billion cubic feet was withdrawn, for net storage injections of -28 billion cubic feet.
R=Revised data.
Sources: Federal Energy Administration and Federal Power Commission.

Coal

Even though the miners' wildcat strike continued into the first 2 weeks of August, production of bituminous coal and lignite totaled 53.4 million tons, up 4.5 percent from the same month in 1975.

July coal exports decreased 25.6 percent from June (the highest monthly level so far this year) to 4.9 million tons, but were 4.2 percent above the July 1975 level.

Domestic consumption of bituminous coal and lignite during May 1976 totaled 46.0 million tons, an increase of 7.8 percent over the consumption level of May 1975.

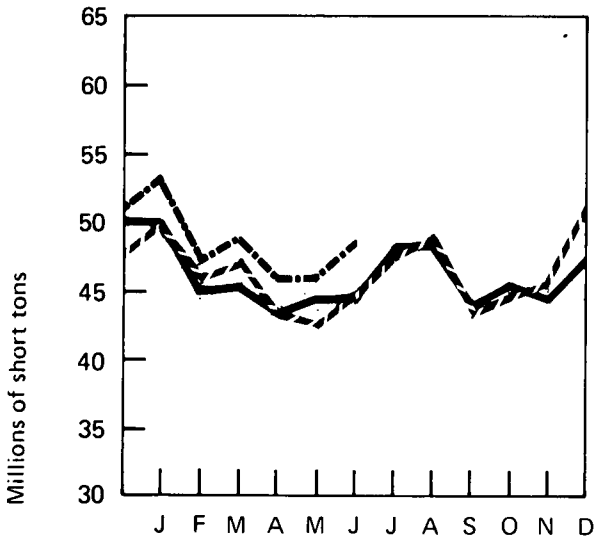
Coal stocks at the end of May were 134.9 million tons, 23.0 percent greater than in May 1975. Electric utilities accounted for 86.9 percent of the May 1976 total.

Bituminous and Lignite

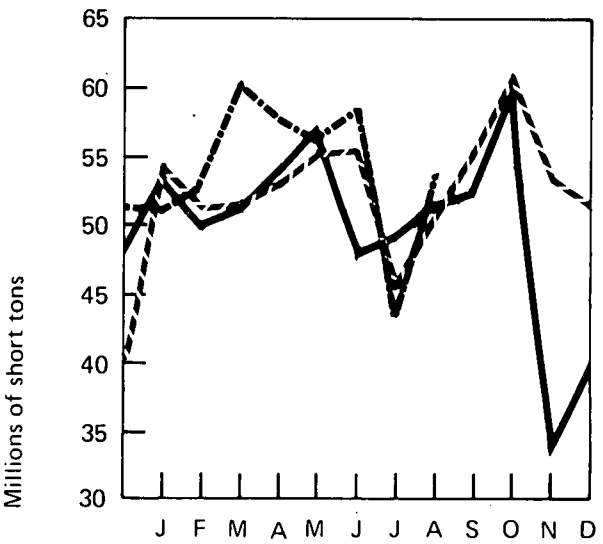
		Domestic Consumption*	Production*	Exports	Stocks
			Thousands of short tons		
1974	January	50,046	53,712	2,813	97,836
	February	44,929	50,053	4,627	95,812
	March	45,858	51,278	3,179	101,568
	April	43,595	54,402	4,944	107,167
	May	44,951	57,662	6,032	112,882
	June	44,315	48,065	6,369	111,935
	July	48,605	49,392	5,307	106,160
	August	48,579	51,808	5,088	105,478
	September	43,844	52,686	4,893	109,173
	October	45,868	60,495	7,342	118,670
	November	44,598	33,702	6,744	109,192
	December	47,521	40,151	2,587	95,528
	TOTAL**	**552,709**	**603,406**	**59,926**	
1975	January	49,841	54,885	4,254	95,512
	February	45,699	51,135	4,470	97,028
	March	47,202	51,910	5,653	97,832
	April	43,537	53,135	6,159	102,663
	May	R42,658	55,370	7,011	R109,666
	June	R44,698	55,730	6,269	R114,857
	July	R47,454	45,560	4,691	R109,133
	August	R49,190	51,160	5,859	R108,522
	September	R44,032	55,560	4,529	R111,922
	October	R44,929	61,000	4,647	R120,344
	November	R45,946	53,035	7,593	R125,808
	December	R51,036	51,520	4,534	R127,115
	TOTAL**	**R556,222**	**640,000**	**65,669**	
1976	January	53,144	51,495	3,697	119,402
	February	47,105	52,630	3,050	119,232
	March	48,967	60,050	3,979	123,697
	April	45,894	57,850	5,780	128,601
	May	R45,993	56,605	5,667	R134,901
	June	***48,957	58,430	6,569	***136,968
	July	NA	43,250	4,886	NA
	August	NA	†53,440	NA	NA
	TOTAL**	**290,060** (6 months)	**433,750** (8 months)	**33,629** (7 months)	

*See Explanatory Note 8.
**Totals may not add due to rounding.
***FEA estimate based on data provided by Bureau of Mines and Federal Power Commission.
†Preliminary data.
R=Revised data. NA=Not available.
Source: Bureau of Mines.

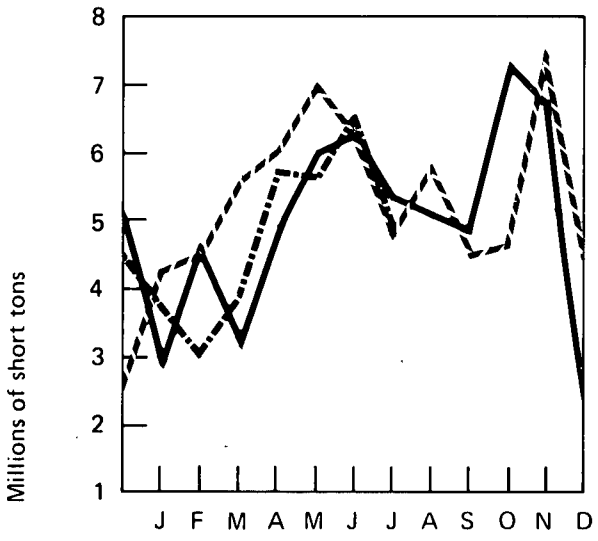
Domestic Consumption



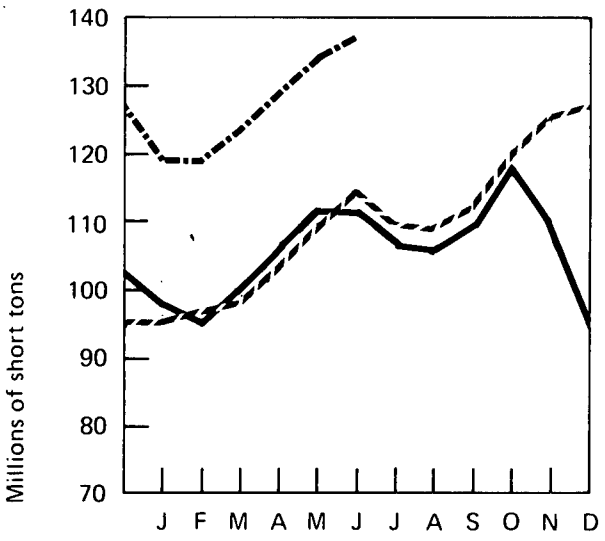
Production



Exports



Stocks

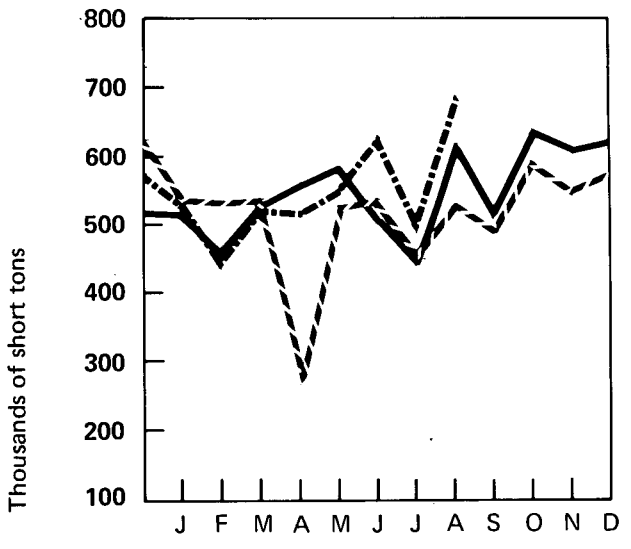


1974
1975
1976

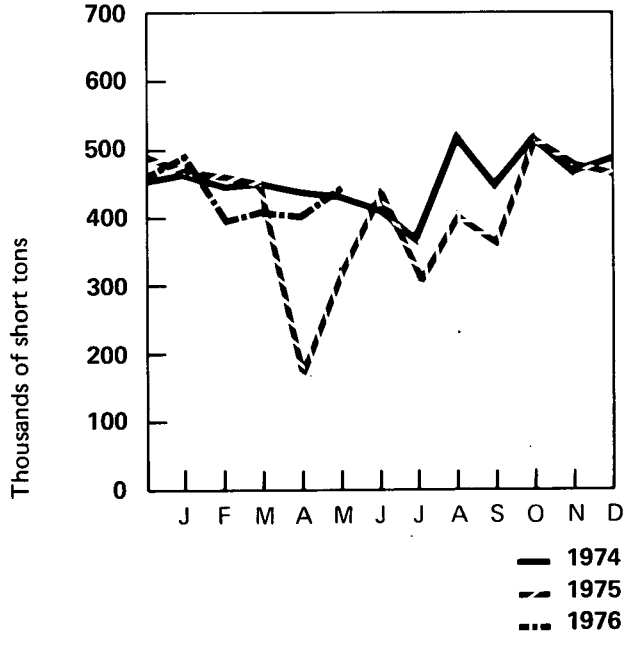
Anthracite

		Production	Apparent Domestic Consumption
		Thousands of short tons	
1974	January	516	466
	February	458	441
	March	531	457
	April	563	437
	May	589	435
	June	505	412
	July	443	360
	August	620	526
	September	516	441
	October	641	522
	November	610	463
	December	625	488
	TOTAL	**6,617**	**5,488**
1975	January	535	470
	February	530	461
	March	540	453
	April	270	164
	May	530	321
	June	540	446
	July	455	305
	August	R535	R414
	September	495	360
	October	595	513
	November	550	479
	December	575	461
	TOTAL	**R6,150**	**R4,847**
1976	January	530	493
	February	440	390
	March	525	416
	April	520	403
	May	555	452
	June	630	NA
	July	490	NA
	August	690	NA
	TOTAL	**4,380** (8 months)	**2,154** (5 months)

Production



Apparent Domestic Consumption



*Preliminary.
NA=Not available.
Sources: Production data are from Bureau of Mines; consumption data are FEA estimates based on figures provided by Bureau of Mines.

Part 5 Electric Utilities

Electric Utilities

Preliminary data indicate that August 1976 production of electricity by utilities was 184.7 billion kilowatt hours, 2.9 percent above the level for August 1975. Production during the first 8 months of 1976 was 5.3 percent above that for the same period in 1975.

Sales of electricity to residential and commercial customers during the first half of 1976 totaled 492.5 billion kilowatt hours, an increase of 0.9 percent for residential customers and 4.6 percent for commercial customers over sales during the first half of 1975. First half sales to industrial customers, at 359.0 billion kilowatt hours, were 10.2 percent higher than the comparable period a year ago.

Cooling Degree-Days

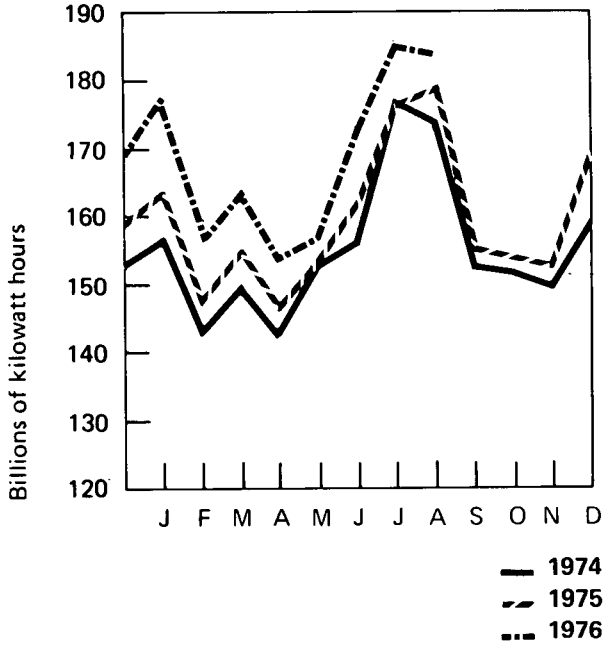
Temperatures continued below normal during August, and as a consequence, the continental United States accumulated 11.6 percent fewer cooling degree-days than last August and 5.8 percent fewer than the average for the month.

Cooling degree-days for the May 3 through August 29 period were also below the total for the comparable period in 1975 (by 12.6 percent) and below normal (by 6.5 percent).

Electric Utilities

		Total Net Production	Percentage Produced from Each Source					
		Millions of kilowatt hours	Coal	Oil	Gas	Nuclear	Hydro-electric	Other*
1974	January	157,235	46.9	16.6	13.2	4.8	18.4	0.1
	February	142,469	46.5	15.8	13.3	5.7	18.6	0.1
	March	150,036	45.2	14.7	15.7	5.9	18.4	0.1
	April	142,019	44.3	14.0	16.9	5.0	19.6	0.2
	May	153,501	44.2	14.7	18.5	4.3	18.2	0.1
	June	156,140	43.3	14.7	20.3	4.6	17.0	0.1
	July	177,925	43.0	15.5	20.9	5.7	14.8	0.1
	August	173,819	43.1	15.6	20.3	7.1	13.8	0.1
	September	152,170	42.9	16.4	19.3	7.2	14.0	0.2
	October	151,885	44.2	16.8	18.6	7.1	13.2	0.1
	November	149,749	44.9	18.4	15.2	7.3	14.1	0.1
	December	159,616	45.5	19.2	12.4	8.3	14.4	0.2
	TOTAL	**1,866,564**	**AVG. 44.5**	**16.0**	**17.1**	**6.1**	**16.1**	**0.2**
1975	January	164,228	45.6	18.6	12.0	8.5	15.2	0.1
	February	147,002	45.8	16.9	12.3	8.6	16.3	0.1
	March	155,430	44.5	14.9	12.9	9.5	18.0	0.2
	April	146,194	44.1	14.5	13.9	9.1	18.2	0.2
	May	153,183	42.3	13.7	16.8	8.9	18.1	0.2
	June	162,707	43.3	14.1	17.7	8.0	16.7	0.2
	July	176,791	43.2	14.2	19.3	8.7	14.4	0.2
	August	179,459	44.0	15.5	19.0	8.7	12.6	0.2
	September	155,150	44.2	13.8	19.4	9.2	13.2	0.2
	October	154,817	44.6	14.2	17.0	9.4	14.6	0.2
	November	152,751	46.1	14.2	14.3	9.2	16.0	0.2
	December	169,313	46.5	15.9	12.2	9.8	15.4	0.2
	TOTAL	**1,917,025**	**AVG. 44.5**	**15.0**	**15.6**	**9.0**	**15.7**	**0.2**
1976	January	178,140	47.0	18.1	11.1	8.9	14.7	0.2
	February	156,703	46.9	15.8	12.2	9.2	15.7	0.2
	March	164,159	46.6	15.5	13.0	8.5	16.2	0.2
	April	153,174	47.4	15.2	14.2	7.2	15.8	0.2
	May	157,216	46.1	13.8	16.1	7.5	16.3	0.2
	June	173,154	44.4	14.5	17.1	9.0	14.8	0.2
	July	185,731	NA	NA	NA	9.5	NA	NA
	August	184,661	NA	NA	NA	9.9	NA	NA
	TOTAL (8 months)	**1,352,938**						

Total Net Production



*Includes electricity produced from geothermal power, wood, and waste.

NA=Not available.

Note: Most of the data appearing in this table have been revised.

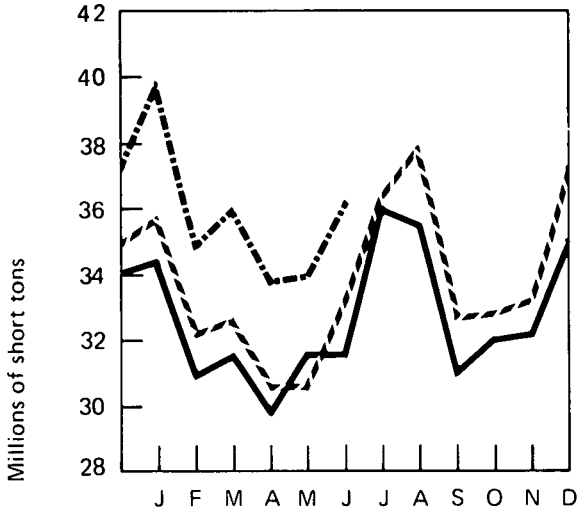
Sources: Federal Power Commission; data for latest 2 months are from Edison Electric Institute and U.S. Nuclear Regulatory Commission.

Fuel Consumption

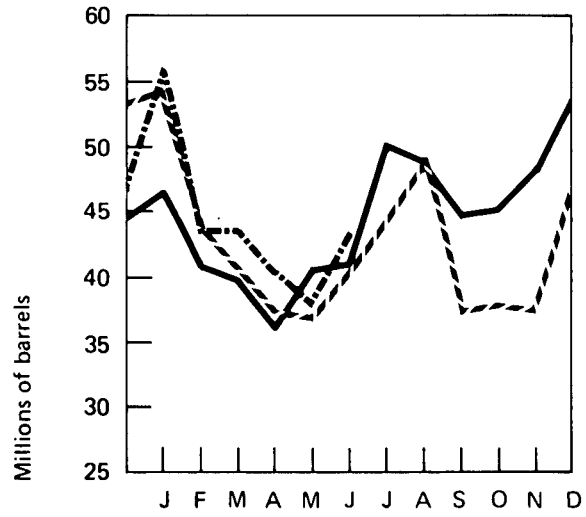
		Coal	Oil	Gas
		Thousands of short tons	Thousands of barrels	Millions of cubic feet
1974	January	34,599	46,727	219,318
	February	30,857	40,657	201,611
	March	31,638	39,633	253,833
	April	29,680	35,953	259,308
	May	31,701	40,816	306,985
	June	31,720	41,233	346,617
	July	36,113	50,160	403,455
	August	35,552	48,981	380,651
	September	30,976	44,549	313,016
	October	32,124	45,260	298,327
	November	32,210	48,558	238,888
	December	35,177	53,644	207,070
	TOTAL	**392,347**	**536,171**	**3,429,079**
1975	January	35,835	54,174	204,591
	February	32,089	43,663	188,446
	March	32,785	40,536	210,202
	April	30,543	37,125	213,740
	May	30,571	37,067	273,920
	June	33,450	41,020	306,798
	July	36,560	44,440	360,534
	August	37,959	49,306	359,273
	September	32,605	37,112	315,122
	October	32,845	38,109	274,224
	November	33,326	37,619	227,101
	December	37,384	46,928	212,923
	TOTAL	**405,952**	**507,099**	**3,146,874**
1976	January	39,978	56,186	204,944
	February	34,958	43,230	198,117
	March	36,079	43,946	221,152
	April	33,799	40,262	226,433
	May	33,943	37,930	264,941
	June	36,374	43,532	310,186
	TOTAL (6 months)	**215,131**	**265,086**	**1,425,773**

Note: Most of the data appearing in this table have been revised.
Source: Federal Power Commission.

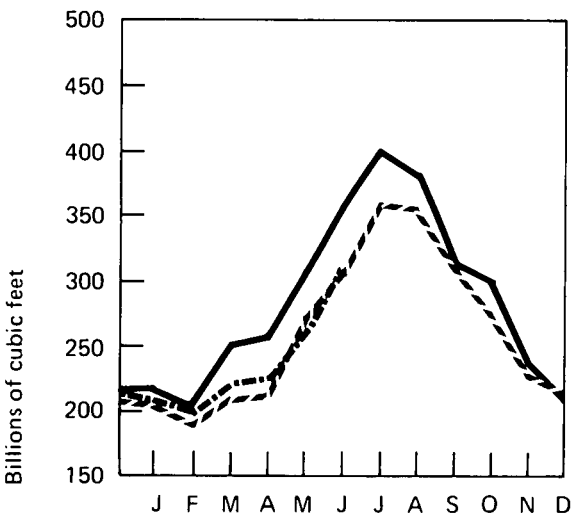
Coal Consumption



Oil Consumption



Gas Consumption

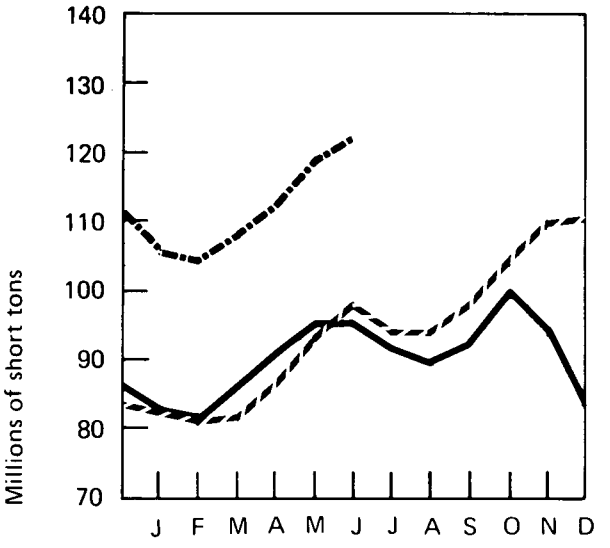


1974
1975
1976

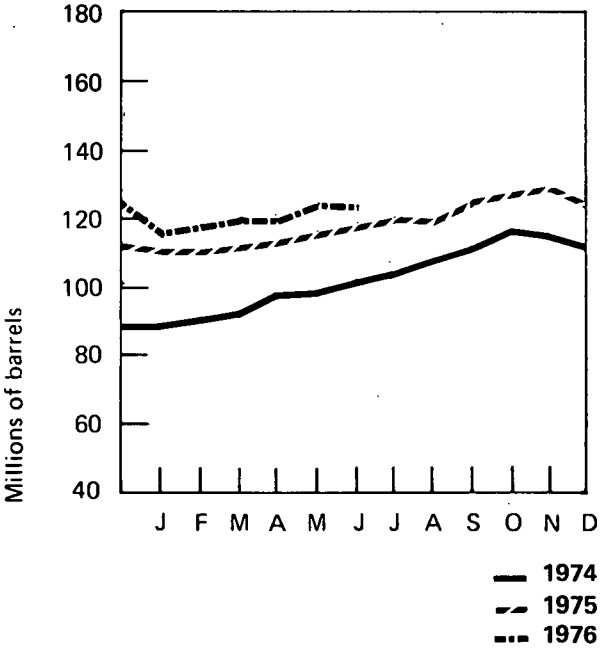
Electric Utilities (Continued)

		Stocks at End of Month	
		Coal	Oil
		Thousands of short tons	Thousands of barrels
1974	January	82,540	89,468
	February	81,720	91,652
	March	86,166	93,879
	April	91,018	98,051
	May	95,601	99,591
	June	95,895	102,395
	July	91,522	105,633
	August	89,474	109,674
	September	92,973	112,502
	October	100,506	118,027
	November	94,165	117,382
	December	83,527	112,894
1975	January	82,073	111,273
	February	80,957	111,478
	March	81,872	113,621
	April	86,811	114,276
	May	93,845	117,205
	June	98,007	118,915
	July	94,261	121,148
	August	94,199	120,595
	September	98,078	126,213
	October	105,397	128,756
	November	110,295	130,203
	December	110,734	125,022
1976	January	105,508	117,732
	February	104,862	118,646
	March	108,431	120,069
	April	112,841	120,158
	May	119,518	125,668
	June	122,875	125,482

Coal Stocks



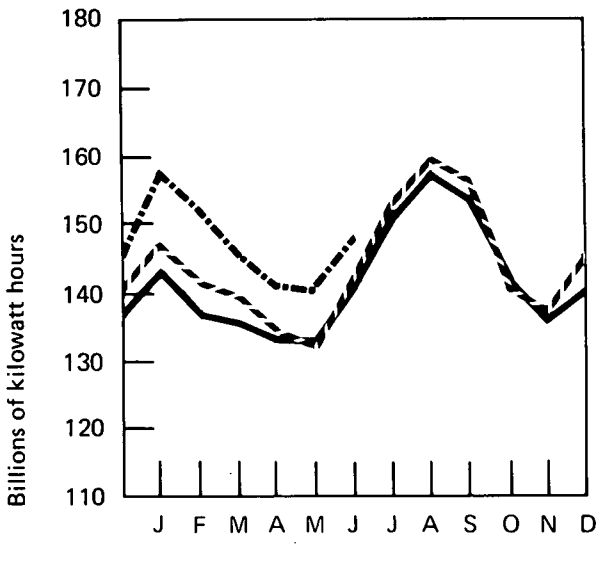
Oil Stocks



Note: Most of the data appearing in this table have been revised.
Source: Federal Power Commission.

		Sales				
		Residential	Commercial	Industrial	Other*	Total
		Millions of kilowatt hours				
1974	January	R52,878	R30,647	R55,457	R5,004	R143,986
	February	R47,779	R29,563	R54,799	R4,596	R136,737
	March	R46,096	R29,345	R55,814	R4,697	R135,952
	April	R43,193	R29,089	R56,115	R4,610	R133,007
	May	R41,105	R30,061	R57,226	R4,685	R133,077
	June	R46,597	R32,989	R57,702	R4,643	R141,931
	July	R53,541	R35,498	R57,503	R4,969	R151,511
	August	R56,699	R36,702	R59,641	R5,070	R158,112
	September	R52,948	R35,801	R59,893	R4,977	R153,619
	October	R44,164	R32,275	R60,116	R4,800	R141,355
	November	R42,671	R30,986	R57,175	R4,952	R135,784
	December	R50,512	R31,868	R53,433	R5,039	R140,852
	TOTAL	**R578,183**	**R384,824**	**R684,874**	**R58,042**	**R1,705,923**
1975	January	R54,003	R32,405	R55,505	R5,954	R147,867
	February	R50,219	R31,459	R54,328	R5,544	R141,550
	March	R47,968	R31,194	R54,437	R5,639	R139,238
	April	R44,762	R30,473	R53,910	R5,269	R134,414
	May	43,226	31,608	53,364	4,745	132,943
	June	48,461	35,266	54,104	4,777	142,608
	July	56,829	37,891	53,973	5,052	153,745
	August	59,979	38,768	56,067	5,223	160,037
	September	56,983	37,550	56,797	5,320	156,650
	October	45,142	33,329	56,486	5,194	140,151
	November	44,019	32,288	56,174	5,235	137,716
	December	51,900	33,183	55,532	5,357	145,972
	TOTAL	**R603,491**	**R405,414**	**R660,677**	**R63,309**	**R1,732,891**
1976	January	60,091	34,833	57,448	6,380	158,752
	February	54,264	33,583	58,228	5,874	151,949
	March	R47,060	R32,273	R60,516	R5,990	R145,839
	April	43,551	31,598	60,106	5,407	140,662
	May	R41,036	R32,347	R61,271	R5,478	R140,132
	June	45,261	36,615	61,438	5,588	148,902
	TOTAL (6 months)	**291,263**	**201,249**	**359,007**	**34,717**	**886,236**

Total Sales



*Includes street lighting and trolley cars.
Source: Federal Power Commission; data for latest month are from Edison Electric Institute.

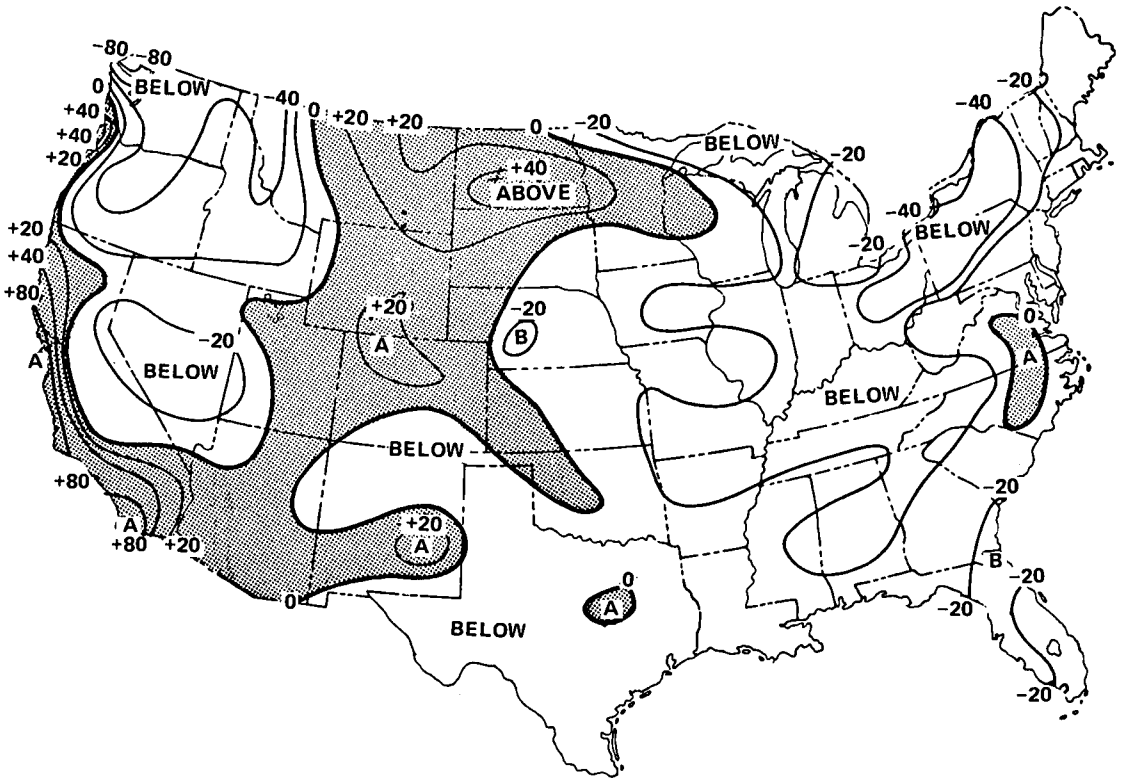
Cooling Degree-Days*

Petroleum Administration for Defense (PAD) Districts	AUGUST (August 2 - August 29) 1976	1975**	Normal (1941-70)**	Cumulative Since May 3 1976	1975**	Normal (1941-70)**
PAD District I	271.7	299.7 (-9.3)	272.4 (-0.3)	931.0	1,048.7 (-11.2)	948.9 (-1.9)
New England Conn., Maine, Mass., N.H., R.I., Vt.	196.5	184.2 (6.7)	163.2 (20.4)	652.9	723.2 (-9.7)	517.7 (26.1)
Middle Atlantic Del., Md., N.J., N.Y., Pa.	239.8	250.3 (-4.2)	232.2 (3.3)	788.2	864.1 (-8.8)	780.4 (1.0)
Lower Atlantic Fla., Ga., N.C., S.C., Va., W.va.	352.5	424.5 (-16.9)	380.7 (-7.4)	1,267.7	1,469.3 (-13.7)	1,391.5 (-8.9)
PAD District II Ill., Ind., Iowa, Kans., Ky., Mich., Minn., Mo., Nebr., N. Dak., Ohio, Okla., S. Dak., Tenn., Wisc.	224.8	285.1 (-21.1)	242.5 (-7.3)	750.9	943.3 (-20.4)	818.8 (-8.3)
PAD District III Ala., Ark., La., Miss., N. Mex., Tex.	436.2	459.5 (-5.1)	479.5 (-9.0)	1,435.2	1,654.8 (-13.3)	1,728.9 (-17.0)
PAD District IV Colo., Idaho, Mont., Utah, Wyo.	161.4	179.7 (-10.2)	195.7 (-17.5)	591.0	574.3 (2.9)	597.3 (-1.0)
PAD District V Ariz., Calif., Nev., Oreg., Wash.	156.5	157.6 (-0.7)	182.9 (-14.4)	599.3	545.1 (10.0)	574.2 (4.4)
U.S. TOTAL	**257.0**	**290.9 (-11.6)**	**272.8 (-5.8)**	**877.3**	**1,003.6 (-12.6)**	**937.9 (-6.5)**

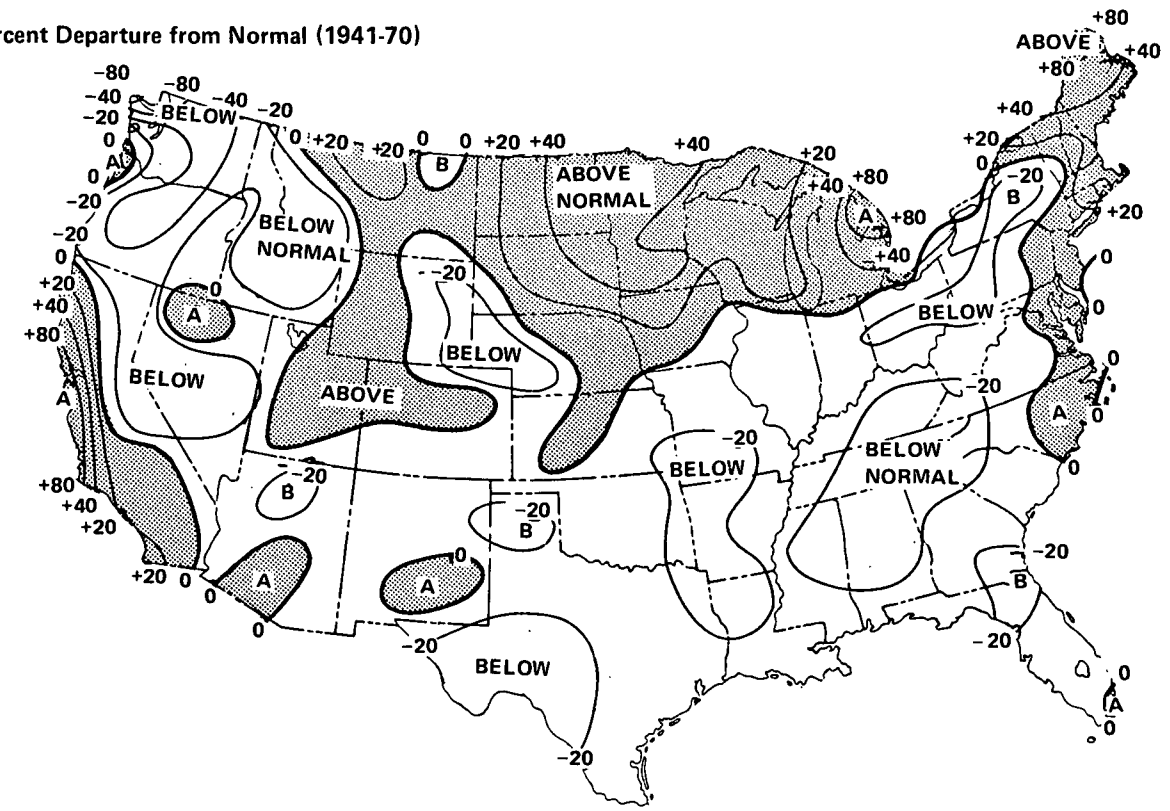
*See Explanatory Note 9 for explanation of cooling degree-days.
**Percentage change in parentheses.

Cooling Degree-Days Accumulated from January 1, 1976 through August 29, 1976

Percent Departure from 1975



Percent Departure from Normal (1941-70)



Note: Above normal cooling degree-days correspond to above normal temperatures.
Source: Department of Commerce—NOAA.

Part 6 Nuclear Power

Nuclear Power

The 53 domestic reactors in commercial operation, with a maximum dependable capacity totaling 35,146 megawatts, performed at 69 percent of capacity during August. For the months of January through May, commercial reactors operated at only 55 percent of dependable capacity primarily because the utilities were refueling in anticipation of heavier demands for electricity in the summer months. For the period of June through August, commercial reactors performed at 65 percent of capacity.

In late July, the U.S. Court of Appeals directed the Nuclear Regulatory Commission (NRC) to reevaluate licensing procedures for nuclear powerplants. In particular, the NRC must consider energy conservation as an alternative to adding new generation capacity and must report in detail the technical status of radioactive waste disposal and spent fuel reprocessing programs. An interim evaluation of licensing procedures is expected from NRC in October. Legal debate on its adequacy is scheduled to begin in December. Until the reevaluation is complete, no new construction or operating permits may be issued by the Commission.

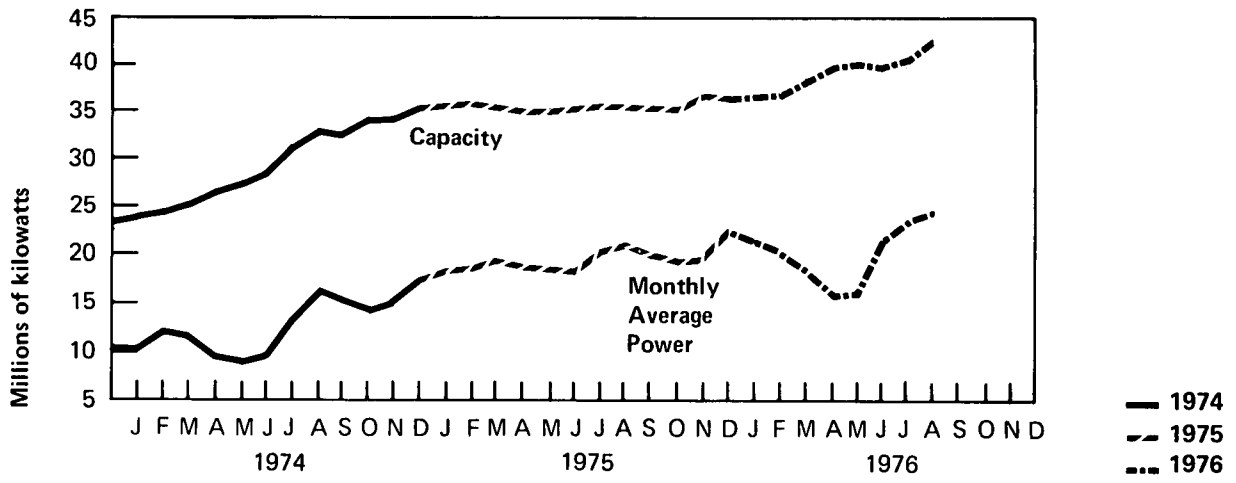
Before the Court of Appeals ruling became effective, in August two pressurized-water reactors were granted licenses to load fuel and begin power ascension. The two were: 1) Calvert Cliffs 2 (845 megawatts), the second unit of a Baltimore Gas and Electric plant located on Chesapeake Bay in Maryland, and 2) Salem 1 (1,090 megawatts), a Public Service Gas and Electric reactor on the lower Delaware River in New Jersey. Including these two units, there are now seven reactors totaling 5,859 megawatts capacity in power ascension status prior to commercial operation.

Nuclear Power

U.S. Nuclear Powerplant Operations*

		Maximum Dependable Capacity	Average Power	Percent of Total Domestic Electricity Generation
		Thousands of net kilowatts		
1974	January	24,006	R10,222	R4.8
	February	24,776	R12,106	R5.7
	March	25,305	R11,819	R5.9
	April	26,862	R9,914	R5.0
	May	27,670	R8,832	R4.3
	June	28,748	R9,844	R4.6
	July	31,374	R13,672	R5.7
	August	33,045	R16,547	R7.1
	September	32,609	R15,258	R7.2
	October	34,464	R14,504	R7.1
	November	34,480	R15,193	R7.3
	December	35,317	R17,733	R8.3
	AVERAGE	**29,921**	**R12,982**	**R6.1**
1975	January	35,691	R18,641	R8.5
	February	35,899	R18,869	R8.6
	March	35,686	R19,926	R9.5
	April	35,017	R18,444	R9.1
	May	35,017	R18,442	R8.9
	June	35,322	R18,065	R8.0
	July	35,596	R20,661	R8.7
	August	35,589	R21,047	R8.7
	September	35,540	R19,890	R9.2
	October	35,540	R19,464	R9.4
	November	36,752	R19,586	R9.2
	December	36,424	R22,321	R9.8
	AVERAGE	**35,671**	**R19,626**	**R9.0**
1976	January	36,750	21,315	R8.9
	February	36,879	R20,605	R9.2
	March	38,072	R18,816	R8.5
	April	39,763	R15,238	R7.2
	May	39,902	R15,899	R7.5
	June	39,781	R21,799	R9.0
	July	40,168	**23,820	**9.5
	August	**42,067	**24,661	**9.9
	AVERAGE (8 months)	**39,424**	**20,278**	**8.8**

U.S. Nuclear Powerplants



*Includes all units licensed to operate, whether in commercial operation or power ascension status.
**Preliminary data.
R=Revised data.
Sources: Average Power for latest 2 months and Capacity are from U.S. Nuclear Regulatory Commission; Percent of Total Domestic Electricity Generation for latest 2 months is based on data from Edison Electric Institute; remaining data are from Federal Power Commission.

Status of Nuclear Powerplants — August 31, 1976

Status	Number of Plants					Design Capacity
	Boiling Water Reactors	High Temperature Gas Reactors	Pressurized Water Reacters	Other*	Total	Net Electrical Megawatts
Licensed to operate	24	1	36	0	61	44,000
Construction permit granted	20	0	53	0	73	76,000
Construction permit pending	22	0	39	5	66	73,000
Orders placed for plant	3	0	15	0	18	21,000
Publicly announced	—	—	—	19	19	23,000
TOTAL	**69**	**1**	**143**	**24**	**237**	**237,000**

*Includes 1 Liquid Metal Fast Breeder Reactor and 23 announced intentions to order for which a reactor type has not been chosen.
Source: U.S. Nuclear Regulatory Commission.

U.S. Uranium Enrichment — August 1976

	Domestic Customers	Foreign Customers	Total
Separative Work Performed (in metric tons of separative work units)	97.542	648.561	746.103
Cost (in millions of dollars)	6.038	39.619	45.657
Product Quantity (in metric tons of uranium)	28.676	173.005	201.681
Feed Requirement (in metric tons of uranium)	133.390	805.849	939.239

Source: U.S. Energy Research and Development Administration.

Nuclear Power Generation by Major Non-Communist Countries — August 1976

Country	Number of Reactors*	Capacity	Generation of Electricity			
			Generation	Percent of Design Capacity		
			August	August	Year	
					1974	1975
		Thousands of gross electrical kilowatts	Millions of gross kilowatt hours			
Canada	5	2,380	1,746	99	74	64
Federal Republic of Germany	8	4,750	1,263	36	57	72
France	10	3,070	1,110	49	57	68
Great Britain	30	6,800	**2,501	**49	61	57
India	3	620	211	46	55	46
Italy	3	630	387	83	61	69
Japan	12	6,600	3,246	66	61	36
Spain	3	1,120	770	93	75	77
Sweden	5	3,310	1,073	44	20	44
Switzerland	3	1,050	503	65	76	84
United States	62	45,680	19,331	57	57	60
TOTAL	**144**	**76,010**	**32,141**	**57**	**58**	**58**

*Includes only operational units, i.e., those which have generated electricity during, or prior to, the current month.
**Figures are for 4-week operating period.
Source: *Nucleonics Week.*

Summary of Monthly Nuclear Fuel Cycle – July 1976

Fuel Cycle Activity	Product	Processed Material*	Percent Utilization of Industry Capacity	Energy Content of Processed Material**	Energy Consumed in Fuel Cycle Activity***	Cost Contribution to Electric Power†
		MTU except where noted		Billion Btu		Mills per kilowatt hour
Milling	Yellowcake (U_3O_8) Deliveries	719	64	248,000	405	1.04
Conversion	Uranium Hexafluoride (UF_6) Deliveries	242	17	84,000	52	0.07
Enrichment	Enriched UF_6 Deliveries	123 (551 MT-SWU)	††	308,000	3,600	0.86
Fabrication	Finished Fuel Assemblies Shipped	181	76	33,800	26	0.46
Powerplant Operation	Electricity Generated	18,680 (million kWhe)	63	198,000	862 (million kWhe)	9.82
	Spent Fuel Discharged	NA	–	–	–	
Reprocessing	Spent Fuel Received	29	–	–	–	†††0.97
	Spent Fuel Reprocessed	0	–	–	–	

*Units of measure are discussed in Explanatory Notes 10 and 11.
**Assumes 25,000 MWD/MTU for heat content of enriched uranium and a 6.1 feed to product ratio at the enrichment plant.
***Energy requirements for processing are obtained from U.S.A.E.C. Report No. WASH 1248.
†Cost contribution is computed from unit prices paid for current month's production and requirement for a model 1000 MWh reactor operating at 80 percent capacity factor, given in U.S.A.E.C. Report No. WASH 1117-74. Because of the long lead time required for nuclear fuel processing, the sum of numbers in this column does not necessarily reflect the fuel cost of current electricity production.
††ERDA's enrichment plans are presently operating at maximum utilization of available electric power, with the excess production being placed in the "Preproduction stockpile" in anticipation of high demand for enriched uranium in the 1980's.
†††Figure represents current industry estimate for cost of spent fuel shipment, reprocessing,and waste deposition.
NA=Not available.
Source: ERDA.

Energy Consumption

Domestic energy consumption in July 1976 totaled 5.731 quadrillion Btu, up 2.7 percent from the July 1975 level, but down 2.3 percent from July 1974. No sectoral breakdown is available for the month as yet.

Cumulative consumption during the first half of the year was 36.702 quadrillion Btu. Of this total, 14.250 quadrillion Btu was consumed by the residential and commercial sector, a decrease of 0.2 percent[1] from the first half of 1975, but an increase of 3.3 percent[1] over the same period in 1974. Direct consumption of primary fuels amounted to 57.6 percent of this sector's total consumption during the period (coal was 0.8 percent, dry natural gas was 33.5 percent, and petroleum products were 23.3 percent). Consumption of electricity accounted for the remaining 42.4 percent.

The industrial sector consumed 13.020 quadrillion Btu during the first 6 months of 1976, up 3.7 percent[1] from the same months in 1975 but down 5.5 percent[1] from the 1974 period. Coal accounted for 14.9 percent of the total, 29.6 percent was dry natural gas, 23.3 percent was petroleum products, and 32.2 percent was electricity.

Consumption in the transportation sector during the January through June period was 9.433 quadrillion Btu, up 2.9 percent[1] from the first half of 1975 and up 5.6 percent[1] from the same period in 1974. Petroleum products comprised 95.5 percent of the total. Natural gas used for pipeline fuel and electricity used by railroads and for street and highway lighting accounted for the balance.

Petroleum Consumption and Forecast

Total demand for petroleum products during August 1976 was 16.03 million barrels per day, 5.5 percent below the forecast level, but 1.7 percent above the consumption level for August 1975.

Domestic demand for motor gasoline in August averaged 7.07 million barrels per day, which was 3.9 percent below the forecast level, but 0.9 percent greater than demand during August 1975.

Domestic demand for distillate fuel oil was 2.35 million barrels per day in August. This figure is 1.7 percent lower than the forecast level, but 8.3 percent above the demand level for last August.

Domestic demand for residual fuel oil during August was 2.02 million barrels per day, 17.9 percent below the forecast level and 4.5 percent below the level for August 1975.

[1] Computed on a daily average basis.

Energy Consumption by Economic Sector and Primary Source — June 1976 [Quadrillion (10^{15}) Btu]

Sector[1]	Primary Energy Source					Primary Energy Consumption	Electricity Distributed[7]	Net Energy Consumption	Electrical Energy Loss Distributed[8]	Ultimate Energy Disposition
	Coal[2]	Natural Gas (dry)[3]	Petroleum[4]	Hydroelectric[5]	Nuclear[6]					
Residential and Commercial	0.014	0.369	0.467	–	–	0.850	0.294	1.144	0.759	1.903
Industrial	0.335	0.587	0.426	0.003	–	1.351	0.210	1.560	0.542	2.102
Transportation	0.001	0.035	1.497	–	([9])	1.532	0.005	1.537	0.012	1.549
Electric Utilities	0.792	0.318	0.266	0.277	0.167	1.821	–	–	–	–
TOTAL	**1.141**	**1.310**	**2.656**	**0.280**	**0.167**	**5.554**	**0.508**	**4.241**	**1.313**	**5.554**

[1] See Explanatory Note 12 for definitions of the Residential and Commercial, Industrial, Transportation, and Electric Utilities Sectors.

[2] Data are from the Bureau of Mines. Includes anthracite and bituminous coal and lignite.

[3] Aggregate data are from the Bureau of Mines. FPC provided data on natural gas consumed by electric utilities. Data from the American Gas Association are used for the Residential and Commercial Sector, adjusted to include a portion of the AGA "Other" category. Natural gas used in transportation, mostly for pipeline use, is estimated to be 3.5 percent of total natural gas consumption less electric utilities. This percentage is derived from 1974 Bureau of Mines data on consumption. The Industrial Sector is then the difference between the total and the sum of the other sectors.

[4] Aggregate petroleum data are from the Bureau of Mines. FPC provided data on oil consumed by electric utilities. Petroleum consumed in transportation was calculated based on Department of Transportation data as follows: Motor gasoline - 100 percent; naphtha jet fuel - 100 percent; kerosene jet fuel - 97 percent; distillate fuel oil - 30.3 percent; residual fuel oil - 11.2 percent; all other products - 4.7 percent. The remainder is distributed to economic sectors using the following percentage shares, derived from 1974 Bureau of Mines data on consumption: Residential and Commercial - 52.3 percent; Industrial - 47.7 percent.

[5] FPC hydroelectric power production plus net imports of electricity from Canada. These imports, estimated at 0.011 quadrillion Btu per month, were assumed to be from hydroelectric power sources. Monthly industrial hydroelectric power consumption is estimated to be one-twelfth of the preliminary Bureau of Mines annual figure for 1975.

[6] FPC nuclear power production.

[7] Electricity was distributed using Edison Electric Institute data on kilowatt-hour sales to ultimate customers. Electrical energy consumed by railroads and for street and highway lighting was distributed to the Transportation Sector. All "other" sales, largely for use in government buildings, were distributed to the Residential and Commercial Sector.

[8] In generating electricity with nuclear or fossil fuels, approximately 65 percent of the energy is lost in the form of heat. Transmission and distribution losses consume about an additional 3 percent of the energy inputs of the utility industry. In order to fully account for all energy consumed both directly and indirectly (i.e., ultimate energy disposition), the electricity losses are allocated to the final end-use sectors in proportion to their direct kilowatt-hour usage.

[9] Negligible.

Percent Changes in Energy Consumption for June 1976 by Sources and Economic Sectors

	June 1976 Consumption	Percent Change from June 1975	Cumulative Percent Change from 1975 (January through June)*
	Quadrillion Btu		
Refined Petroleum Products	2.661	+3.0	+3.5
Motor Gasoline	1.146	+2.9	+4.6
Jet Fuel	0.165	-1.0	-3.2
Distillate	0.396	0.0	+0.2
Residual	0.386	-6.1	-0.5
Other Petroleum Products	0.568	+13.1	+10.1
Natural Gas (Dry)	1.310	+1.8	-1.5
Coal (Anthracite, bituminous, and lignite)	1.141	+9.4	+5.5
Electricity (Sales)	0.508	+4.4	+5.1
TOTAL ENERGY USE	5.554	+3.9	+2.0
Economic Sector Consumption			
Residential and Commercial	1.903	+2.4	-0.2
Industrial	2.102	+6.8	+3.7
Transportation	1.549	+2.1	+2.9

*Calculated on daily average basis.

Energy Consumption (Continued)

Energy Consumption by the Residential and Commercial Economic Sector[1]

		Coal	Natural Gas (dry)	Petroleum[2]	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
				Quadrillion (10^{15}) Btu				
1974	January	0.040	1.158	0.662	R0.297	R0.700	R2.856	R2.856
	February	0.034	1.027	0.590	R0.274	R0.601	R2.526	R5.381
	March	0.027	0.902	0.569	0.268	R0.644	R2.411	R7.792
	April	0.019	0.754	0.530	0.258	R0.598	R2.158	R9.950
	May	0.016	0.499	0.497	0.254	R0.655	R1.921	R11.871
	June	0.015	0.357	0.503	R0.283	R0.687	R1.845	R13.717
	July	0.014	0.293	0.507	R0.316	R0.847	R1.977	R15.694
	August	0.021	0.265	0.519	R0.331	R0.809	R1.945	R17.639
	September	0.025	0.278	0.513	R0.315	R0.655	R1.786	R19.424
	October	0.027	0.395	0.589	R0.272	0.636	R1.920	R21.345
	November	0.027	0.569	0.583	0.263	R0.638	R2.079	R23.424
	December	0.031	0.930	0.628	R0.293	R0.742	R2.624	R26.048
	TOTAL	**0.297**	**7.427**	**6.688**	**R3.424**	**R8.212**	**R26.048**	
1975	January	0.035	1.124	0.648	R0.310	R0.758	R.2875	R2.875
	February	0.023	1.105	0.553	R0.292	R0.646	R2.619	R5.495
	March	0.023	1.018	R0.565	R0.284	R0.693	R2.583	R8.078
	April	0.011	0.905	0.506	R0.270	R0.632	R2.323	R10.401
	May	R0.011	0.522	0.457	0.267	R0.680	R1.936	R12.336
	June	R0.014	R0.338	R0.451	0.297	R0.758	R1.858	R14.194
	July	R0.016	0.293	R0.481	0.336	R0.868	R1.993	R16.187
	August	R0.016	0.264	R0.460	0.350	R0.879	R1.969	R18.156
	September	R0.020	0.281	0.501	0.336	R0.693	R1.831	R19.987
	October	R0.025	0.353	0.555	0.280	0.677	R1.890	R21.877
	November	R0.025	0.523	0.517	0.273	0.659	R1.997	R23.874
	December	R0.034	0.910	R0.642	0.303	R0.780	R2.669	R26.542
	TOTAL	**R0.253**	**R7.635**	**R6.337**	**R3.596**	**R8.721**	**R26.542**	
1976	January	0.032	1.229	0.675	0.340	R0.841	R3.116	R3.116
	February	0.019	1.106	R0.589	0.314	R0.687	R2.716	R5.832
	March	R0.018	0.858	0.587	R0.286	R0.703	R2.452	R8.284
	April	R0.014	0.704	R0.513	0.270	R0.629	R2.130	R10.414
	May	R0.012	0.510	0.497	R0.267	R0.646	R1.933	R12.347
	June	0.014	0.369	0.467	0.294	0.759	1.903	14.250
	TOTAL	**0.110**	**4.776**	**3.328**	**1.771**	**4.265**	**14.250**	

(See footnotes on page 46)

Energy Consumption by the Industrial Economic Sector[1]

		Coal	Natural Gas (dry)	Petroleum[3]	Hydroelectric	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
		Quadrillion (10^{15}) Btu							
1974	January	0.378	0.830	0.603	0.003	R0.189	0.447	R2.450	R2.450
	February	0.354	0.804	0.538	0.003	R0.187	0.409	2.295	R4.745
	March	0.358	0.827	0.519	0.003	R0.190	0.457	R2.354	R7.099
	April	0.352	0.662	0.483	0.003	R0.191	R0.444	R2.137	R9.236
	May	0.342	0.788	0.453	0.003	R0.195	R0.503	R2.284	R11.520
	June	0.326	0.724	0.458	0.003	R0.197	R0.478	R2.186	R13.706
	July	0.325	0.806	0.462	0.003	R0.196	R0.526	R2.318	R16.024
	August	0.335	0.853	0.473	0.003	R0.203	R0.497	R2.365	R18.389
	September	0.325	0.933	0.468	0.003	R0.204	R0.425	R2.358	R20.747
	October	0.347	0.997	0.537	0.003	0.205	0.480	2.569	R23.316
	November	0.312	1.001	R0.531	0.003	R0.195	0.473	2.516	R25.832
	December	0.309	0.945	0.573	0.003	R0.182	R0.462	R2.474	R28.307
	TOTAL	**4.062**	**10.170**	**6.100**	**0.036**	**R2.337**	**R5.602**	**R28.307**	
1975	January	0.344	R0.897	0.591	0.003	R0.189	R0.464	R2.488	R2.488
	February	0.344	R0.626	0.505	0.003	R0.185	R0.410	R2.074	R4.562
	March	0.365	R0.656	R0.515	0.003	R0.186	R0.453	R2.178	R6.740
	April	R0.340	R0.440	0.461	0.003	R0.184	R0.431	R1.859	R8.599
	May	R0.322	R0.524	0.417	0.003	0.182	R0.464	R1.912	R10.511
	June	R0.300	R0.600	R0.411	0.003	0.185	R0.470	R1.969	R12.480
	July	0.287	R0.648	0.439	0.003	0.184	R0.476	R2.038	R14.518
	August	0.294	R0.733	0.420	0.003	0.191	R0.481	R2.122	R16.640
	September	0.294	R0.761	0.457	0.003	0.194	0.400	R2.109	R18.749
	October	0.307	R0.902	R0.506	0.003	0.193	0.465	R2.376	R21.125
	November	0.319	R0.872	0.471	0.003	0.192	0.463	R2.320	R23.445
	December	0.338	R0.904	R0.585	0.003	0.189	R0.488	R2.507	R25.952
	TOTAL	**R3.854**	**R8.563**	**R5.780**	**0.036**	**R2.254**	**R5.465**	**R25.952**	
1976	January	0.329	R0.844	0.616	0.003	0.196	0.485	R2.473	R2.473
	February	0.312	R0.505	R0.537	0.003	0.199	R0.434	R1.990	R4.463
	March	R0.332	R0.730	R0.536	0.003	R0.206	R0.508	R2.316	R6.779
	April	0.314	R0.565	R0.468	0.003	0.205	R0.478	R2.032	R8.811
	May	R0.321	R0.615	R0.453	0.003	R0.209	R0.505	R2.107	R10.918
	June	0.335	0.587	0.426	0.003	0.210	0.542	2.102	13.020
	TOTAL	**1.943**	**3.847**	**3.035**	**0.018**	**1.225**	**2.952**	**13.020**	

(See footnotes on page 46)

Energy Consumption (Continued)

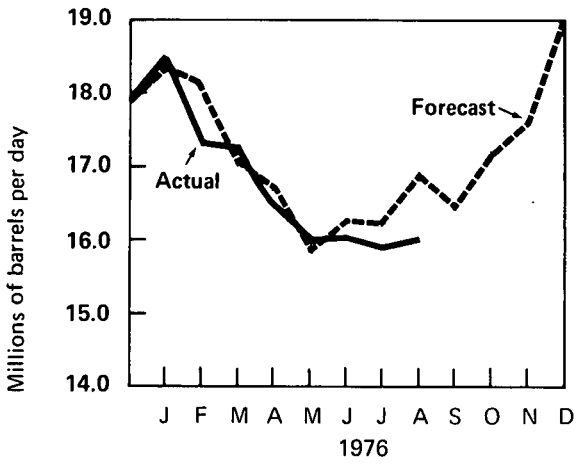
Energy Consumption by the Transportation Economic Sector[1]

		Coal	Natural Gas (dry)[4]	Petroleum	Electricity Distributed	Electrical Energy Loss Distributed	Total Energy Use	Cumulative Total Energy Use
					Quadrillion (10^{15}) Btu			
1974	January	0.001	0.072	1.399	0.005	0.013	1.490	1.490
	February	0.001	0.066	1.300	0.005	0.011	1.384	2.874
	March	0.001	0.063	1.417	0.005	0.012	1.498	R4.372
	April	0.001	0.051	1.397	0.005	0.011	1.465	R5.837
	May	0.001	0.047	1.484	0.005	0.012	1.547	7.384
	June	0.001	0.039	1.448	0.005	0.011	1.503	8.887
	July	0.001	0.040	1.514	0.005	0.012	R1.572	10.458
	August	0.001	0.041	1.533	0.005	0.012	1.590	R12.049
	September	0.001	0.044	1.393	0.005	0.010	1.453	13.501
	October	0.001	0.051	1.507	0.005	0.012	1.576	15.077
	November	0.001	0.057	1.455	0.005	0.013	1.532	R16.609
	December	0.001	0.068	1.546	0.006	0.014	1.634	R18.243
	TOTAL	**0.009**	**0.638**	**17.392**	**0.060**	**0.144**	**R18.243**	
1975	January	0.001	R0.073	1.498	0.006	0.014	R1.592	R1.592
	February	0.001	0.063	1.334	0.005	0.012	1.415	R3.006
	March	0.001	0.061	1.456	0.005	0.013	1.536	R4.542
	April	0.001	R0.049	1.455	0.005	0.012	R1.522	R6.064
	May	0.001	0.038	1.480	0.005	0.012	1.536	R7.600
	June	0.001	0.034	1.466	0.005	R0.012	R1.517	R9.116
	July	0.001	0.034	1.498	0.005	R0.013	1.550	R10.666
	August	0.001	0.036	1.509	0.005	0.012	1.563	R12.229
	September	0.001	0.038	1.420	0.005	0.010	1.473	R13.703
	October	0.001	R0.045	1.495	0.005	0.013	R1.559	R15.262
	November	0.001	R0.051	1.379	0.006	0.013	1.449	R16.711
	December	0.001	0.066	1.556	0.006	0.015	1.643	R18.354
	TOTAL	**0.008**	**0.587**	**17.547**	**0.062**	**R0.150**	**R18.354**	
1976	January	0.001	R0.075	1.531	0.006	0.015	R1.627	R1.627
	February	0.001	0.058	1.378	0.006	0.012	R1.455	R3.082
	March	0.001	R0.058	1.551	0.005	0.013	R1.628	R4.710
	April	0.001	R0.046	R1.515	0.005	0.012	R1.579	R6.288
	May	0.001	R0.041	1.537	0.005	0.012	1.596	R7.884
	June	0.001	0.035	1.497	0.005	0.012	1.549	9.433
	TOTAL	**0.004**	**0.313**	**9.009**	**0.032**	**0.076**	**9.433**	

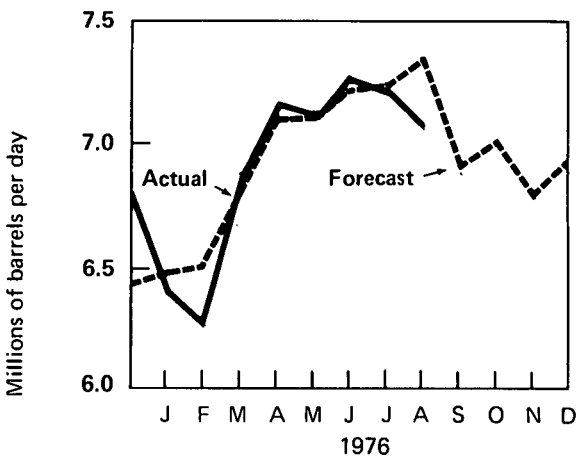
[1] See Explanatory Note 12 for definitions of the Residential and Commercial, Industrial, and Transportation Sectors. The methodology used for sector calculation is provided in the footnotes of the previous table. Printed totals may differ slightly from the sum of their row/column components due to independent rounding.
[2] The percentage share used in calculating Residential and Commercial consumption of petroleum was 52.5 percent for 1973 and 52.3 percent for 1974, 1975, and 1976.
[3] The percentage share used in calculating Industrial consumption of petroleum was 47.5 percent for 1973 and 47.7 percent for 1974, 1975, and 1976.
[4] The percentage share used in calculating Transportation consumption of natural gas was 3.9 percent for 1973 and 3.5 percent for 1974, 1975, and 1976.
R=Revised data.

Petroleum Consumption and Forecast

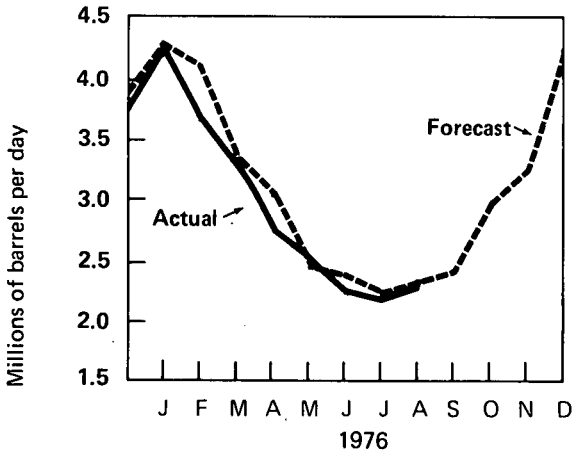
Total Domestic Demand for Petroleum Products



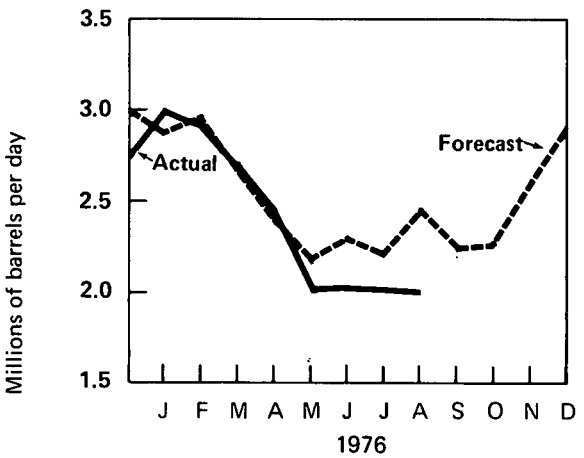
Domestic Demand for Motor Gasoline



Domestic Demand for Distillate Fuel Oil



Domestic Demand for Residual Fuel Oil



Notes:

Domestic Demand – Demand for products, in terms of real consumption, is not available; production plus imports plus withdrawals from primary stocks is used as a proxy for consumption. Secondary stocks, not measured by BOM and API, are substantial for some products.

Actuals – Based on BOM data for January through April and API data for May through August.

Forecast – See Explanatory Note 5 for discussion of basic assumptions for forecast.

Part 8

Resource Development

Oil and Gas Exploration

Substantial gains were made in most areas of oil and gas exploration activity during August. The average number of rotary drilling rigs in operation jumped to 1,691 from 1,597 during July. The August rig count surpassed the number of rigs in operation during August 1975 by 2.8 percent. This was the first monthly year-to-year increase since January 1976.

August well completions climbed to 3,116, up 5.3 percent from the July total and 4.5 percent from the level for August 1975. For the January through August period, total wells drilled were 16.2 percent above the number drilled during the corresponding period of 1975.

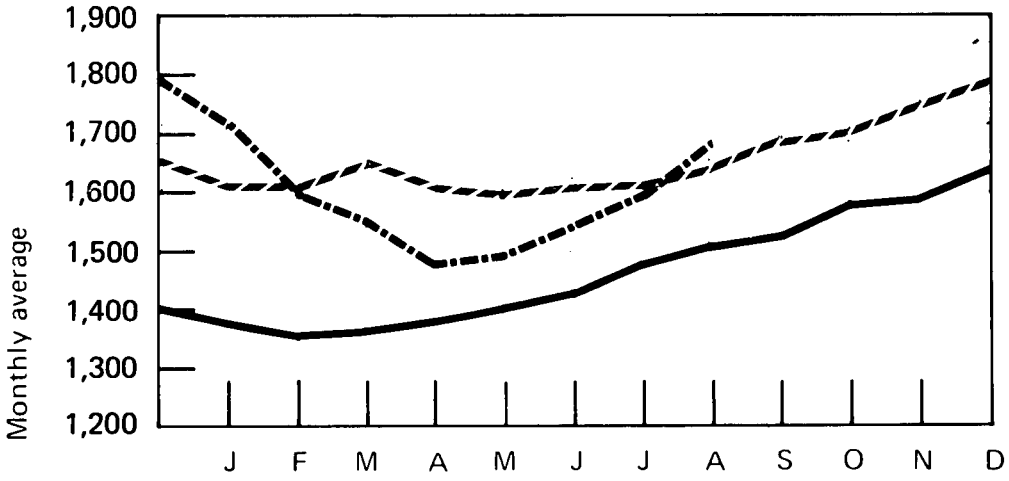
There were 275 crews (242 land, 33 marine) engaged in seismic petroleum exploration during August, 5 more than in July, and 37 more than in April, when crew activity was at a 2-year low. In spite of the increase, crew activity remained below the levels reported for August 1975 and August 1974, when 289 and 321 crews were active, respectively.

Oil and Gas Exploration

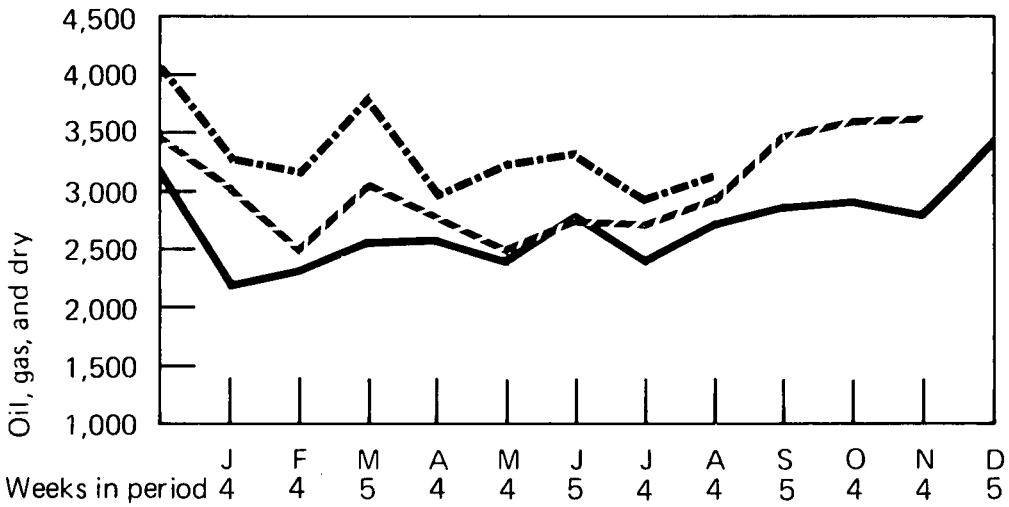
		Rotary Rigs in Operation	Wells Drilled				Total Footage of Wells Drilled
		Monthly average	Oil	Gas	Dry	Total	Thousands of feet
1974	January	1,372	763	577	803	2,143	10,392
	February	1,355	901	600	816	2,317	12,160
	March	1,367	936	638	1,003	2,577	12,844
	April	1,381	947	700	945	2,592	13,349
	May	1,412	957	520	870	2,347	11,460
	June	1,432	1,238	586	982	2,806	12,976
	July	1,480	1,008	461	884	2,353	11,802
	August	1,518	1,210	555	968	2,733	12,410
	September	1,527	1,200	600	1,091	2,891	12,676
	October	1,584	1,131	551	1,241	2,923	14,081
	November	1,596	1,008	626	1,053	2,767	11,795
	December	1,643	1,339	791	1,274	3,404	15,707
	AVERAGE	**1,475**	**TOTAL* 12,784**	**7,240**	**11,674**	**31,698**	**150,551**
1975	January	1,615	1,299	655	1,040	2,994	13,189
	February	1,611	1,097	458	933	2,488	12,071
	March	1,651	1,341	658	1,091	3,090	15,472
	April	1,604	1,181	506	1,071	2,758	13,545
	May	1,592	1,100	451	891	2,442	12,054
	June	1,613	1,246	509	1,022	2,777	13,540
	July	1,616	1,229	557	920	2,706	12,545
	August	1,645	1,272	587	1,122	2,981	14,221
	September	1,699	1,504	831	1,165	3,500	15,636
	October	1,716	1,633	682	1,310	3,625	16,689
	November	1,757	1,619	776	1,270	3,665	15,788
	December	1,793	1,817	832	1,424	4,073	17,556
	AVERAGE	**1,660**	**TOTAL* 16,408**	**7,580**	**13,247**	**37,235**	**174,434**
1976	January	1,710	1,465	772	1,055	3,292	14,517
	February	1,594	1,341	652	1,159	3,152	14,888
	March	1,540	1,726	821	1,301	3,848	18,126
	April	1,480	1,237	672	994	2,903	13,765
	May	1,496	1,501	658	1,104	3,263	14,196
	June	1,546	1,500	709	1,123	3,332	14,780
	July	1,597	1,312	730	916	2,958	13,716
	August	1,691	1,265	711	1,140	3,116	14,697
	AVERAGE (8 months)	**1,581**	**TOTAL* 11,327** (8 months)	**5,759**	**8,729**	**25,815**	**118,705**

*Totals reflect subsequent data revisions and therefore may not agree with cumulative monthly data.
Sources: Rotary Rigs – Hughes Tool Company; Wells – American Petroleum Institute.

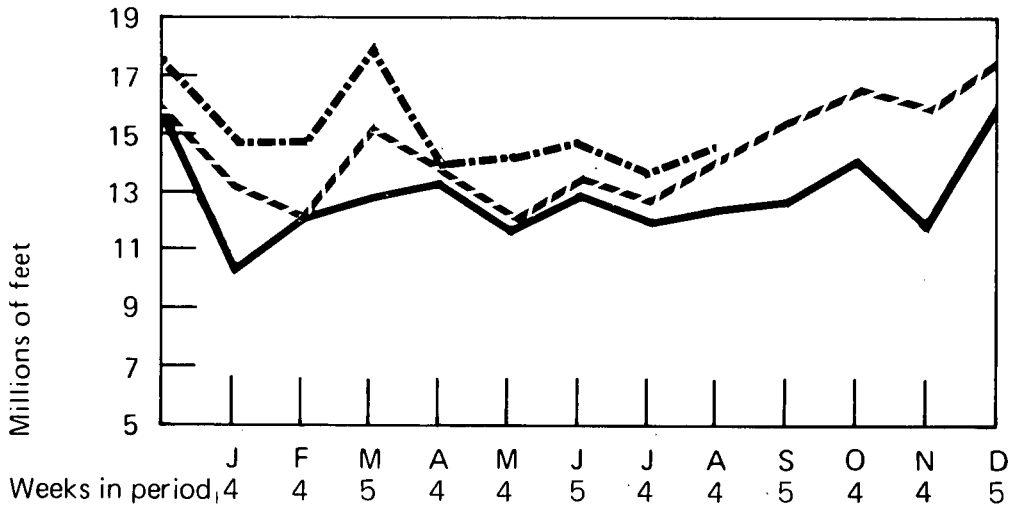
Rotary Rigs in Operation



Total Wells Drilled



Total Footage of Wells Drilled

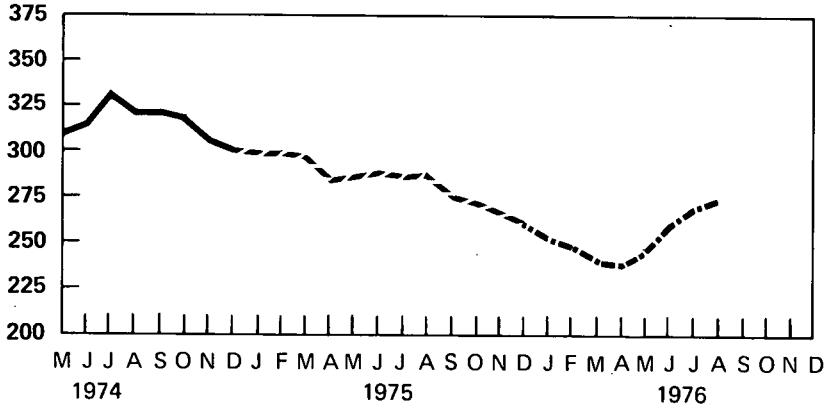


1974
1975
1976

Oil and Gas Exploration (Continued)

		Crews Engaged in Seismic Exploration			Line Miles of Seismic Exploration		
		Offshore	Onshore	Total	Offshore	Onshore	Total
		Monthly average			Monthly average		
1973	Year	23	227	250	21,579	10,597	32,175
1974	Year	31	274	305	28,482	13,219	41,701
1975	Year	30	254	284	25,773	12,558	38,331
1974	January-April	NA	NA	NA			
	May	35	278	313			
	June	38	279	317			
	July	35	299	334			
	August	34	287	321			
	September	34	287	321			
	October	32	288	320			
	November	30	276	306			
	December	25	275	300			
1975	January	27	274	301			
	February	24	278	302			
	March	23	276	299			
	April	23	260	283			
	May	32	254	286			
	June	38	251	289			
	July	37	249	286			
	August	40	249	289			
	September	40	234	274			
	October	29	241	270			
	November	27	238	265			
	December	26	233	259			
1976	January	20	232	252			
	February	17	232	249			
	March	18	222	240			
	April	17	221	238			
	May	21	226	247			
	June	29	229	258			
	July	30	240	270			
	August	33	242	275			
	AVERAGE (8 months)	**23**	**231**	**254**			

Total Seismic Crews



NA=Not available.
Source: Society of Exploration Geophysicists.

Gasoline

The national average selling price for regular gasoline at full service retail outlets reached 60.1 cents per gallon in August, an increase of 0.5 cent over the average price in July. The average price that retailers paid for regular gasoline rose an equal amount, leaving the dealer margin unchanged at 7.4 cents per gallon for the fourth month in a row.

Crude Oil

The preliminary average "upper tier" crude oil price during July was $11.60 per barrel, unchanged from the revised June figure. Domestic crude oil prices will be frozen at June's level for the period July 1 through November 30, 1976.

The preliminary "lower tier" crude oil price in July was $5.19 per barrel, an increase of 4 cents from the level for June.

The preliminary average price for domestic crude oil was $8.04, up 5 cents from the average price in June.

The increase in the lower tier price was due to a slight increase in the quality of crude oil purchased. The domestic average price advanced by more than the amount attributed to the lower tier price increase as a result of a higher percentage of upper tier crude oil purchases.

The preliminary average cost of domestic crude purchased by refiners during June was $8.59 per barrel, 3 cents above the level for May.

The preliminary refiner acquisition cost of imported crude during June was $13.47 per barrel, an increase of 27 cents over the previous month's cost.

The preliminary estimate of the composite cost of crude petroleum purchased by refiners during June was $10.88 per barrel, an increase of 35 cents over the cost in May. A large part of this rise was due to an increase in purchases of foreign crude.

Utility Fossil Fuels

During April, the national average cost of fossil fuels delivered to utilities remained relatively stable, decreasing 1.4 cents per million Btu from the cost in March to 106.4 cents per million Btu.

The national average cost of coal delivered to utilities in April rose only 0.4 cent to 83.7 cents per million Btu. The most pronounced regional fluctuation was in the Mountain region where coal costs declined an average of 7.8 cents per million Btu.

The national average cost of residual fuel oil delivered to utilities decreased by 1.0 cent to 196.7 cents per million Btu. The Mountain region experienced an increase of 15.8 cents per million Btu whereas the Pacific region reported a 7.6-cent decline. Utility residual fuel oil costs are generally the highest in these 2 areas.

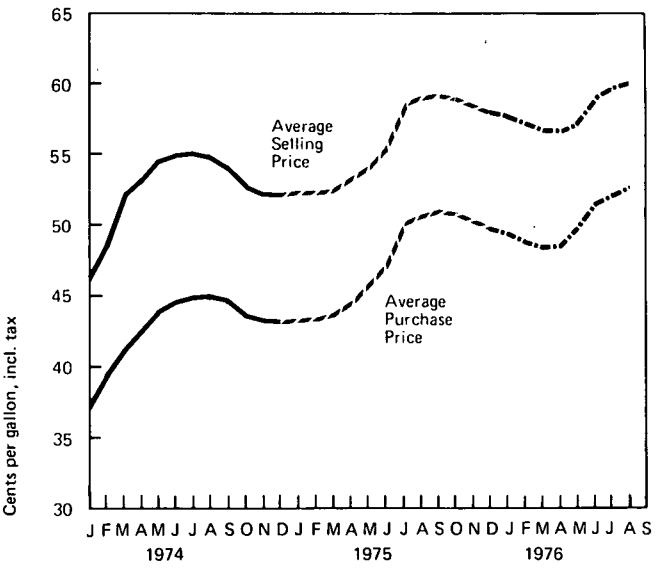
The average cost of natural gas increased 2.5 cents in April to 97.4 cents per million Btu. The most substantial regional fluctuation occurred in the Middle Atlantic region (an increase of 44.0 cents per million Btu).

Motor Gasoline

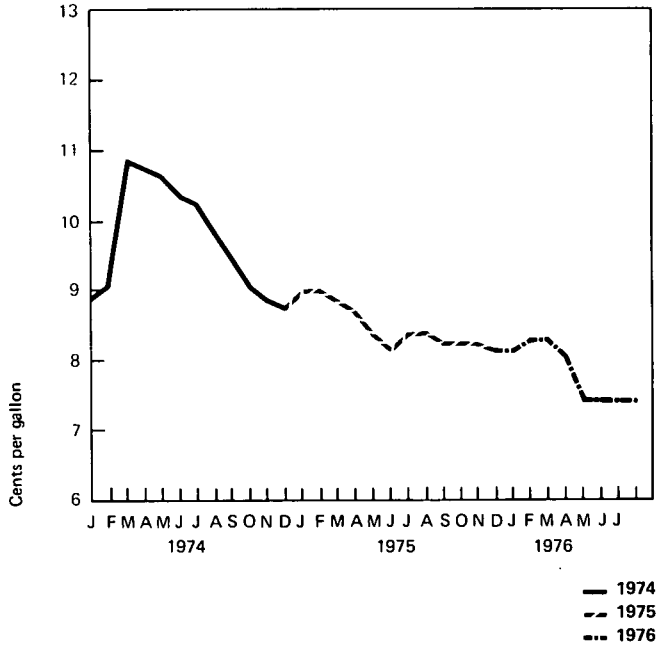
Regular Gasoline at Full Service Retail Outlets

		Average Selling Price	Average Purchase Price	Average Dealer Margin
		Cents per gallon, including tax*		
1974	January	46.3	37.4	8.9
	February	48.8	39.7	9.1
	March	52.3	41.4	10.9
	April	53.4	42.7	10.7
	May	54.7	44.1	10.6
	June	55.1	44.8	10.3
	July	55.2	45.0	10.2
	August	54.9	45.1	9.8
	September	54.2	44.8	9.4
	October	52.4	43.4	9.0
	November	52.0	43.2	8.8
	December	52.0	43.3	8.7
	AVERAGE	**52.8**	**43.1**	
1975	January	52.4	43.4	9.0
	February	52.5	43.5	9.0
	March	52.6	43.8	8.8
	April	53.5	44.9	8.6
	May	54.3	46.0	8.3
	June	55.6	47.5	8.1
	July	58.7	50.3	8.4
	August	59.2	50.8	8.4
	September	59.3	51.1	8.2
	October	58.9	50.7	8.2
	November	58.4	50.2	8.2
	December	58.0	49.9	8.1
	AVERAGE	**56.2**	**47.8**	
1976	January	57.7	49.6	8.1
	February	57.1	48.8	8.3
	March	56.6	48.3	8.3
	April	56.6	48.6	8.0
	May	57.4	50.0	7.4
	June	59.0	51.6	7.4
	July	59.6	52.2	7.4
	August	60.1	52.7	7.4

Average Retail Prices For Regular



Average Margins For Regular



*To derive prices excluding taxes, 12.2 cents per gallon may be deducted for 1974 and 1975, and 12.5 may be deducted for 1976.

Sources: FEA for January through December 1974; Lundberg Survey, Inc., for January 1975 forward.

Regular Gasoline at Self Service Retail Outlets

		Average Selling Price	Average Dealer Margin
		Cents per gallon, including tax	
1975	November	55.4	5.5
	December	54.9	5.3
1976	January	54.7	5.4
	February	53.8	5.4
	March	53.2	5.3
	April	53.2	4.9
	May	54.4	4.5
	June	56.3	4.8
	July	56.6	4.6
	August	56.7	4.4

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Average Selling Prices for Premium and Unleaded Gasoline at Full Service Retail Outlets

		Premium	Unleaded (Mid-Level)
		Cents per gallon, including tax	
1974	January	50.1	48.8
	February	52.6	50.8
	March	56.0	53.6
	April	57.2	55.1
	May	58.5	57.1
	June	58.5	57.4
	July	59.0	57.2
	August	58.0	56.8
	September	58.2	55.8
	October	56.6	54.1
	November	56.3	53.9
	December	56.3	53.9
1975	January	57.1	NA
	February	57.3	56.2
	March	57.5	56.3
	April	58.2	57.0
	May	59.0	57.9
	June	60.3	58.4
	July	63.1	61.7
	August	63.6	62.2
	September	63.8	62.2
	October	63.4	62.1
	November	63.2	62.1
	December	62.9	61.9
1976	January	62.7	61.3
	February	62.1	60.7
	March	61.6	60.2
	April	61.6	60.5
	May	62.4	61.3
	June	63.9	63.1
	July	64.6	63.5
	August	65.2	64.1

Sources: FEA for January through December 1974; Lundberg Survey, Inc., for January 1975 forward.

Average Selling Prices and Margins for Major and Independent Retail Dealers — August 1976

(Cents per gallon, including tax)

Regular Gasoline—Full Service

	Selling Price	Margin
Major	60.9	7.7
Independent	55.9	6.0
National Average	**60.1**	**7.4**

Regular Gasoline—Self Service

	Selling Price	Margin
Major	57.6	4.3
Independent	54.5	4.5
National Average	**56.7**	**4.4**

Premium Gasoline—Selling Prices

	Full Service	Self Service
Major	65.9	63.2
Independent	60.2	58.9
National Average	**65.2**	**62.0**

Unleaded Gasoline—Full Service Selling Prices

	Regular	Mid-Level	Premium
Major	62.4	64.7	68.8
Independent	58.6	59.1	65.9
National Average	**62.4**	**64.1**	**68.8**

Source: Lundberg Survey, Inc.

Average Regional Selling Prices and Dealer Margins for Regular Gasoline at Full Service Retail Outlets — August 1976

Region	Selling Price	Margin
	Cents per gallon, including tax	
1A New England	59.0	6.6
1B Mid Atlantic	61.0	6.4
1C Lower Atlantic	60.9	8.1
2 Mid Continent	59.8	6.8
3 Gulf Coast	57.9	8.7
4 Rocky Mountain	61.5	9.4
5 West Coast	61.9	8.0
National Average	**60.1**	**7.4**

Source: Lundberg Survey, Inc.

Motor Gasoline (Continued)

Retail Gasoline Price Changes for 21 Leading Refiners During August 1976 and Entitlement Position* During July 1976

Company	Effective Date of Change	Amount of Change	Entitlement Position (July)
		Cents per gallon	
Amerada Hess		None	Seller
American Petrofina	August 10	1.00	Seller
Ashland		None	Seller
Atlantic Richfield	August 23	1.00	Buyer
B.P.	August 28	0.50 (PAD I, wholesale only)	Seller
Cities Service	August 11	0.50 (Wholesale only)	Buyer
Champlin	August 2	-4.20 (PAD I) -1.50 (PAD II, IV) -1.20 (PAD V)	Buyer
Continental	August 5	1.00 (PAD V)	Buyer
Exxon	August 3	1.00	Buyer
Getty		None	Seller
Gulf		None	Buyer
Kerr-McGee	August 7	-0.50	Buyer
Mobil		None	Buyer
Phillips		None	Buyer
Shell	August 11 August 14	1.00 (PAD I, II, III, IV) 1.00 (PAD V)	Buyer
Standard Oil of California	August 12	1.00	Seller
Standard Oil of Indiana		None	Buyer
Standard Oil of Ohio		None	Seller
Sun		None	Buyer
Texaco	August 20	-1.00 (Retailers and distributors only)	Buyer
Union Oil of California	August 19	0.80	Buyer

*See definitions.
Source: FEA.

Jobber Prices for Regular Gasoline Sold by 21 Leading Refiners

		Northeast	Mid-Atlantic	Southeast	Central	Western	Southwest	Pacific	National Average
		Cents per gallon, excluding tax							
1974	January	21.4	21.4	21.1	21.3	22.2	20.1	21.0	21.2
	February	23.7	23.6	22.5	23.9	23.5	22.5	22.6	23.2
	March	25.4	25.2	24.1	25.3	24.5	24.2	25.2	24.8
	April	26.7	26.1	24.8	26.0	25.6	24.7	25.0	25.6
	May	28.5	28.4	26.8	28.2	27.7	26.3	26.3	27.5
	June	29.8	29.4	28.0	29.3	29.3	27.1	27.2	28.6
	July	29.9	29.3	28.0	29.4	28.9	27.8	28.0	28.8
	August	29.7	29.4	28.6	29.6	29.1	28.1	28.6	29.0
	September	29.3	28.9	28.0	28.8	28.7	27.4	27.8	28.4
	October	28.0	27.2	26.6	27.5	27.0	26.2	26.6	27.0
	November	27.8	27.3	26.6	27.5	27.5	26.3	27.3	27.2
	December	27.7	27.6	26.9	27.7	27.9	26.7	27.3	27.4
	AVERAGE								**26.7**
1975	January	27.8	27.8	27.4	28.2	28.5	27.2	27.8	27.8
	February	28.4	28.2	27.8	28.7	28.3	27.6	27.5	28.1
	March	28.9	28.8	28.4	29.1	29.0	27.8	28.0	28.6
	April	29.6	29.9	29.4	30.4	29.8	29.2	29.8	29.7
	May	30.9	31.0	30.5	31.6	31.2	30.4	31.0	30.9
	June	32.4	32.5	32.0	33.1	32.6	31.6	32.6	32.4
	July	34.4	34.6	33.9	34.9	34.5	33.4	33.7	34.2
	August	35.3	35.1	34.6	35.6	35.2	34.1	34.5	34.9
	September	35.2	35.1	34.5	35.4	35.0	34.1	34.5	34.8
	October	34.3	34.6	34.0	34.9	34.3	33.8	34.2	34.3
	November	34.1	34.3	33.9	34.6	34.3	33.6	34.0	34.1
	December	33.7	34.1	33.6	34.3	33.8	33.3	33.7	33.8
	AVERAGE								**32.0**
1976	January	33.3	33.9	33.2	34.0	33.2	33.1	33.5	33.5
	February	33.0	33.4	32.6	33.8	32.6	32.9	33.5	33.1
	March	32.4	33.0	31.8	33.4	32.5	32.6	33.2	32.7
	April	33.0	33.5	32.3	33.9	33.2	33.2	33.2	33.2
	May	34.4	34.9	33.6	35.3	34.8	34.8	34.7	34.6
	June	35.7	35.9	34.8	36.5	36.1	35.9	35.5	35.8
	July	36.1	36.3	35.4	36.8	36.3	36.3	36.3	36.2
	August	36.5	36.6	35.7	37.3	36.4	36.5	36.7	36.5

Source: FEA.

Diesel Fuel

Average Selling Prices and Margins for Diesel Fuel*

(Cents per gallon, including tax)

		Selling Prices		Margins	
		Truck Stops	Service Stations	Truck Stops	Service Stations
1974	January	NA	46.0	NA	6.7
	February	NA	45.9	NA	6.6
	March	NA	46.8	NA	7.2
	April	NA	48.3	NA	7.2
	May	NA	48.4	NA	7.2
	June	NA	49.3	NA	7.7
	July	NA	49.7	NA	7.3
	August	NA	49.9	NA	7.3
	September	NA	49.6	NA	7.4
	October	NA	49.3	NA	7.5
	November	NA	49.3	NA	7.2
	December	NA	49.2	NA	7.5
1975	January	NA	50.6	NA	6.8
	February	49.7	50.2	7.0	7.3
	March	50.1	50.2	7.5	7.4
	April	50.5	50.6	7.4	7.5
	May	50.3	51.0	7.0	7.7
	June	51.4	51.4	7.5	7.9
	July	51.2	52.4	7.3	8.2
	August	52.1	52.6	8.1	8.9
	September	52.1	52.7	7.4	8.7
	October	51.8	53.0	6.2	7.7
	November	52.0	53.0	5.3	6.5
	December	51.7	52.4	5.3	6.7
1976	January	52.5	52.0	5.6	7.2
	February	52.0	52.1	6.0	7.3
	March	52.4	51.4	5.6	7.1
	April	52.8	51.1	5.8	7.8
	May	59.9	51.4	6.9	7.8
	June	53.3	52.0	7.0	7.7
	July	52.1	53.1	6.4	7.1
	August	52.3	53.2	6.0	7.0

*See Explanatory Note 13.
Sources: FEA for January through December 1974; Lundberg Survey, Inc., for January 1975 forward.

Average Selling Prices and Margins for Major and Independent Retail Dealers — August 1976

(Cents per gallon, including tax)

Truck Stops

	Selling Price	Margin
Major	53.4	5.6
Independent	50.8	6.6
National Average	**52.3**	**6.0**

Service Stations

	Selling Price	Margin
Major	55.3	6.9
Independent	51.4	7.1
National Average	**53.2**	**7.0**

Source: Lundberg Survey, Inc.

Heating Oil

Residential Heating Oil Prices

		Average Selling Price	Average Purchase Price	Average Dealer Margin
		Cents per gallon		
1974	January	31.1	23.4	7.7
	February	32.8	25.4	7.4
	March	33.8	25.9	7.9
	April	34.0	25.9	8.1
	May	35.1	26.8	8.3
	June	35.3	27.5	7.8
	July	35.2	28.1	7.1
	August	35.8	28.1	7.7
	September	36.3	28.7	7.6
	October	35.6	28.9	6.7
	November	37.9	29.1	8.8
	December	36.9	28.5	8.4
	AVERAGE	**34.7**	**26.9**	
1975	January	37.4	29.1	8.3
	February	37.0	28.7	8.3
	March	36.6	28.4	8.2
	April	36.1	29.3	6.8
	May	36.7	30.0	6.7
	June	37.1	30.3	6.8
	July	37.2	30.6	6.6
	August	38.0	31.2	6.8
	September	38.4	31.0	7.4
	October	39.3	31.8	7.5
	November	39.4	32.1	7.3
	December	40.1	32.4	7.7
	AVERAGE	**37.7**	**31.2**	
1976	January	40.1	32.4	7.7
	February	40.1	32.4	7.7

Source: FEA.

Residential Heating Oil Prices by Region

		New England	Mid Atlantic	Southeast	East North Central	East South Central	West North Central	West South Central	Mountain	West Coast
						Cents per gallon				
1974	January	31.9	31.6	30.8	30.3	29.8	31.3	NA	30.4	30.5
	February	33.8	33.5	32.8	30.9	32.0	32.9	NA	37.2	32.8
	March	31.9	33.7	33.9	34.2	30.6	34.5	NA	NA	NA
	April	34.3	34.8	32.5	33.5	33.7	30.1	NA	34.2	32.6
	May	34.8	35.6	36.2	34.2	34.4	32.6	NA	34.8	37.8
	June	35.9	36.2	35.8	34.9	31.1	33.6	NA	35.9	39.1
	July	35.2	35.5	35.6	34.4	30.2	34.9	NA	36.1	36.3
	August	36.3	36.1	37.8	35.1	33.7	35.2	NA	NA	35.9
	September	37.2	36.5	36.1	35.0	33.6	35.8	NA	32.3	35.1
	October	36.7	35.9	36.9	33.3	34.1	33.8	NA	35.6	36.3
	November	39.0	38.7	37.4	36.4	35.3	35.6	NA	37.3	36.4
	December	38.3	38.7	36.8	34.2	34.7	33.5	NA	35.8	33.9
1975	January	40.2	38.9	36.5	33.2	34.7	34.0	NA	37.5	38.0
	February	39.2	38.4	36.8	33.4	34.7	33.3	NA	36.6	37.7
	March	38.0	37.8	36.4	34.2	33.2	34.3	NA	NA	36.8
	April	37.4	36.8	36.8	33.2	33.7	34.5	NA	38.9	36.8
	May	37.6	36.9	36.4	35.1	34.7	35.4	NA	37.0	37.8
	June	37.7	37.7	36.4	35.8	NA	35.9	NA	37.6	37.6
	July	37.9	36.9	36.9	36.4	34.7	36.8	NA	NA	38.8
	August	38.8	38.2	37.9	36.3	35.7	36.3	NA	41.3	39.3
	September	39.4	38.7	37.6	36.5	35.7	36.8	NA	38.9	40.1
	October	40.3	39.9	38.3	37.4	36.6	37.9	NA	39.0	41.0
	November	41.0	39.6	38.7	37.9	NA	38.1	NA	40.2	41.3
	December	41.0	41.1	39.0	38.5	34.1	38.0	NA	44.8	40.9
1976	January	41.3	40.6	39.9	38.6	NA	39.0	NA	40.2	42.0
	February	41.1	41.6	39.2	38.5	37.2	38.9	NA	NA	40.8

NA=Not available.
Source: FEA.

Average Distributor Purchase Prices for Heating Oil by Region

		New England	Mid Atlantic	Southeast	East North Central	East South Central	West North Central	West South Central	Mountain	West Coast
						Cents per gallon				
1974	January	22.3	23.4	23.3	23.8	23.5	24.0	NA	22.5	23.0
	February	24.9	25.5	25.3	24.8	25.2	26.4	NA	29.7	25.3
	March	24.9	25.0	26.3	25.6	24.0	27.0	NA	NA	NA
	April	25.7	26.0	26.0	27.1	26.3	24.0	NA	26.8	26.0
	May	26.3	27.0	27.5	27.3	27.4	25.8	NA	27.1	26.2
	June	27.5	27.6	27.8	29.0	25.4	27.4	NA	27.3	28.0
	July	28.1	28.2	28.3	27.5	25.2	28.5	NA	28.2	29.1
	August	28.1	28.2	27.9	27.5	29.3	28.8	NA	NA	28.2
	September	29.2	28.9	28.5	27.8	28.2	28.4	NA	29.3	28.8
	October	29.9	29.4	28.8	27.7	28.3	27.4	NA	29.9	29.2
	November	29.8	29.7	28.8	27.8	29.1	27.6	NA	27.9	29.8
	December	29.3	29.4	28.4	27.4	28.8	26.7	NA	29.3	27.0
1975	January	30.3	29.7	28.5	27.2	28.8	27.5	NA	28.5	29.7
	February	29.6	29.3	28.6	27.2	28.8	27.3	NA	29.4	28.5
	March	29.5	29.3	29.1	28.1	26.8	28.1	NA	NA	27.6
	April	29.4	29.5	29.7	28.3	27.8	29.5	NA	29.0	28.5
	May	30.5	30.0	30.0	30.0	28.8	29.4	NA	30.9	28.7
	June	30.4	30.2	30.6	30.5	NA	30.7	NA	31.8	29.0
	July	30.7	30.1	29.9	31.6	28.8	31.4	NA	NA	30.4
	August	31.6	30.8	30.9	31.2	29.8	30.2	NA	31.6	32.8
	September	31.4	30.9	30.7	30.6	29.8	30.6	NA	31.9	31.4
	October	32.0	31.9	31.3	31.5	31.1	31.4	NA	34.4	32.5
	November	32.5	31.7	32.0	32.1	NA	32.0	NA	34.1	32.3
	December	32.9	32.7	31.8	32.0	29.4	31.4	NA	33.9	32.8
1976	January	32.5	32.5	31.9	32.3	NA	32.3	NA	33.6	32.9
	February	32.8	32.9	31.6	31.9	31.3	32.1	NA	NA	31.1

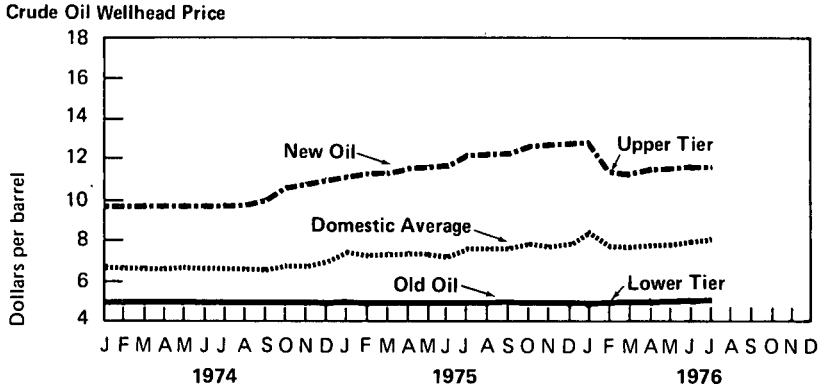
NA=Not available.
Source: FEA.

Crude Oil

Domestic Crude Petroleum Prices at the Wellhead*

		Old	New	Domestic Average
		Dollars per barrel		
1974	January	5.03	9.82	6.95
	February	5.03	9.87	6.87
	March	5.03	9.88	6.77
	April	5.03	9.88	6.77
	May	5.03	9.88	6.87
	June	5.03	9.95	6.85
	July	5.03	9.95	6.80
	August	5.03	9.98	6.71
	September	5.03	10.10	6.70
	October	5.03	10.74	6.97
	November	5.03	10.90	6.97
	December	5.03	11.08	7.09
	AVG.	**5.03**	**10.13**	**6.87**
1975	January	5.05	11.28	7.61
	February	5.03	11.39	7.47
	March	5.03	11.47	7.57
	April	5.03	11.64	7.55
	May	5.03	11.69	7.52
	June	5.03	11.73	7.49
	July	5.03	12.30	7.75
	August	5.03	12.38	7.73
	September	5.04	12.46	7.75
	October	5.03	12.73	7.83
	November	5.03	12.89	7.80
	December	5.03	12.95	7.93
	AVG.	**5.03**	**12.03**	**7.67**
1976	January	5.02	12.99	8.63
		Lower Tier**	**Upper Tier****	
	February	5.06	11.47	7.87
	March	5.07	11.39	7.79
	April	5.07	11.52	7.86
	May	5.13	R11.55	R7.89
	June	5.15	R11.60	7.99
	July	***5.19	***11.60	***8.04

Crude Oil Wellhead Price



*See Explanatory Note 14. **See definitions. ***Preliminary figure based on early reports. R=Revised data.
Sources: January 1974 through January 1976—FEA Crude Petroleum Production Monthly Report; February 1976 forward—FEA Domestic Crude Oil Purchasers Report.

Crude Oil (Continued)

Percentages of Domestic Production Sold at the Wellhead

		Old Oil	New Oil	Released	Stripper
1975	January*	58	19	10	12
	February*	61	17	9	12
	March	60	18	10	12
	April	61	17	9	12
	May	62	17	8	13
	June	63	16	8	13
	July	62	16	8	14
	August	63	16	7	14
	September*	63	15	7	14
	October	63	16	7	14
	November	64	15	7	14
	December	63	16	7	14
	AVERAGE	62	16	8	13
1976	January	54	21	10	15
		Lower Tier	Upper Tier		
	February	56	30	–	14
	March	57	29	–	14
	April*	57	29	–	15
	May	57	29	–	14
	June**	56	29	–	15
	July**	56	30	–	14

*Totals do not add to 100 due to rounding.
**Preliminary.
Sources: January 1975 through January 1976—FEA Crude Petroleum Production Monthly Report; February 1976 forward—FEA Domestic Crude Oil Purchasers Report for Lower Tier percentages, FEA estimates for Upper Tier and Stripper percentages.

Entitlement Prices*

		Dollars
1974	November	5.00
	December	5.00
1975	January	6.00
	February	6.75
	March	7.31
	April	7.29
	May	7.39
	June	7.82
	July	8.13
	August	8.31
	September	8.31
	October	8.62
	November	8.94
	December	8.55
1976	January	8.09
	February	7.85
	March	7.89
	April	7.85
	May	7.82
	June	7.91
	July	7.82

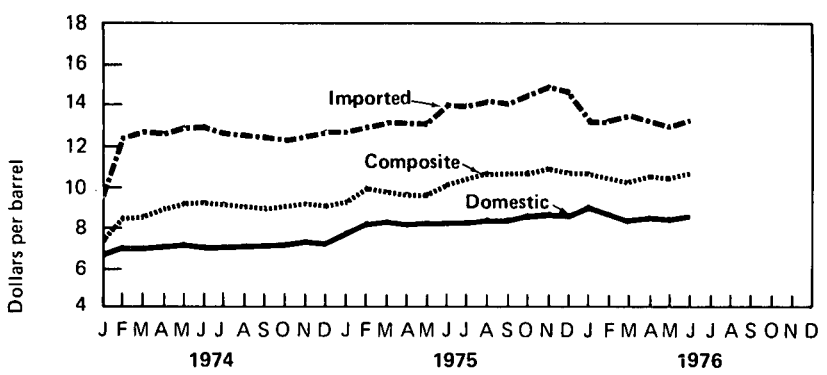
*See definitions
Source: FEA.

Refiner Acquisition Cost of Crude Petroleum

		Domestic *	Imported**	Composite
		Dollars per barrel		
1974	January	6.72	9.59	7.46
	February	7.08	12.45	8.57
	March	7.05	12.73	8.68
	April	7.21	12.72	9.13
	May	7.26	13.02	9.44
	June	7.20	13.06	9.45
	July	7.19	12.75	9.30
	August	7.20	12.68	9.17
	September	7.18	12.53	9.13
	October	7.26	12.44	9.22
	November	7.46	12.53	9.41
	December	7.39	12.82	9.28
	AVERAGE	**7.18**	**12.52**	**9.07**
1975	January	7.78	12.77	9.48
	February	8.29	13.05	10.09
	March	8.38	13.28	9.91
	April	8.23	13.26	9.83
	May	8.33	13.27	9.79
	June	8.33	14.15	10.33
	July	8.37	14.03	10.57
	August	8.48	14.25	10.81
	September	8.49	14.04	10.79
	October	8.68	14.66	10.85
	November	8.67	15.04	11.05
	December	8.66	14.81	10.98
	AVERAGE	**8.39**	**13.93**	**10.38**
1976	January	9.14	13.27	10.76
	February	R8.67	R13.26	R10.54
	March	R8.48	R13.51	R10.44
	April	R8.66	R13.39	R10.63
	May	8.56	13.20	10.53
	June	***8.59	***13.47	***10.88

*See Explanatory Note 14.
**See Explanatory Note 15.
***Preliminary data.
Source: FEA.

Crude Oil Refiner Acquisition Cost



Crude Oil (Continued)

Estimated Landed Cost of Imported Crude Petroleum From Selected Countries*

		Algeria	Canada	Indonesia	Iran	Nigeria	Saudi Arabia	U.A. Emirates	Venezuela
					Dollars per barrel				
1974	January	NA	6.70	NA	8.53	12.13	NA	NA	10.28
	February	NA	10.90	NA	12.11	12.74	NA	NA	11.31
	March	NA	11.14	12.13	13.02	13.26	NA	NA	11.78
	April	13.63	11.02	12.49	12.83	13.67	11.59	NA	11.38
	May	14.67	11.47	12.95	13.84	13.83	11.53	NA	11.28
	June	14.43	12.56	13.21	13.44	13.03	11.32	13.06	10.39
	July	13.65	12.65	13.77	13.02	12.75	11.97	12.34	10.64
	August	13.96	12.49	14.38	12.31	12.70	12.16	12.69	11.20
	September	13.83	12.51	13.42	11.87	12.28	11.45	NA	11.01
	October	13.20	12.53	14.24	12.07	12.12	11.51	12.84	10.95
	November	13.43	12.33	13.45	12.15	12.83	12.15	13.54	11.15
	December	13.08	12.15	14.15	11.63	12.88	11.75	14.59	11.37
1975	January	12.72	12.43	13.30	12.11	12.07	12.07	13.14	11.37
	February	12.11	12.15	13.52	11.86	12.18	11.94	12.67	11.56
	March	12.46	12.79	13.94	12.08	12.56	11.78	13.40	11.66
	April	12.36	12.95	13.71	12.34	12.46	12.16	12.55	11.61
	May	12.41	12.08	13.71	11.93	12.34	12.27	13.29	11.54
	June	12.37	11.90	13.73	12.51	12.49	11.93	12.48	11.51
	July	12.69	12.15	13.98	11.83	12.37	12.08	12.78	11.46
	August	12.68	12.27	13.85	12.17	12.32	12.10	12.60	11.44
	September	12.52	12.63	13.75	11.97	12.42	12.17	12.49	11.42
	October	13.45	13.02	14.00	12.27	13.18	12.64	12.85	12.08
	November	13.28	14.00	13.81	12.47	13.37	12.58	13.23	12.38
	December	13.46	13.96	13.92	13.01	13.57	12.93	13.21	12.31
1976	January	13.56	12.95	13.89	13.01	13.61	13.18	13.50	11.60
	February	13.57	13.24	13.94	12.87	13.52	13.21	13.36	12.09
	March	13.83	13.30	13.94	12.77	13.62	13.18	13.37	11.71
	April	13.73	13.61	13.78	12.91	13.60	13.11	13.18	11.95
	May	13.47	13.62	13.84	12.82	13.62	13.05	13.39	11.61
	June	13.75	14.19	13.84	13.00	13.78	13.14	13.09	11.55
	July	13.77	13.79	13.80	12.76	13.81	13.02	13.45	11.44

*See Explanatory Note 15.
Source: FEA.

Unrecouped Costs for Refined Products for 30 Largest Refiners

		Distillate *	Motor Gasoline	Aviation Jet Fuel**	Other Products	Total
		Millions of dollars				
1974	January	116	91		43	250
	February	184	87		175	446
	March	198	85		237	520
	April	223	215		346	783
	May	261	255		446	963
	June	326	394		630	1,350
	July	355	325		648	1,327
	August	392	349		665	1,405
	September	409	431		650	1,490
	October	295	424		531	1,250
	November	245	475		595	1,315
	December	209	413		492	1,114
1975	January	254	431		672	1,357
	February	300	418		790	1,508
	March	282	452		966	1,700
	April	302	485		807	1,594
	May	292	370		771	1,433
	June	284	266		785	1,334
	July	233	219		624	1,075
	August	280	344		583	1,208
	September	347	335		661	1,342
	October	338	245		673	1,255
	November	426	275		796	1,497
	December	446	211		826	1,483
1976	January	336	242	131	515	1,224
	February	R279	R336	R145	R456	R1,216
	March	R263	R316	R163	R456	R1,198
	April	R237	R398	R180	R524	R1,339
	May	264	632	161	446	1,503
	June	—	628	135	349	1,112

*After May 1976, reporting of the distillate bank is no longer required due to decontrol of middle distillates.
**Prior to January 1976 refiners were not required to maintain separate banks for aviation jet fuel.
R=Revised data.
Source: FEA.

Natural Gas

Natural Gas Prices Reported by Major Interstate Pipeline Companies

		PURCHASES			SALES		
		From Domestic Producers	From Canadian and Mexican Sources	Total Purchases	To Industrial Users*	To Resellers**	Total Sales
		Cents per thousand cubic feet					
1974	January	24.3	42.7	25.7	48.1	55.0	55.1
	February	25.4	43.2	26.8	49.8	56.4	56.4
	March	25.7	43.2	27.0	50.8	56.9	56.9
	April	25.8	46.4	27.4	49.3	57.6	57.4
	May	25.7	49.3	27.5	49.9	58.6	57.9
	June	26.0	47.7	27.5	50.8	59.4	58.5
	July	26.3	58.7	28.6	52.5	62.0	61.1
	August	26.1	57.5	28.4	55.2	64.4	63.5
	September	27.3	58.8	29.5	54.7	65.2	64.3
	October	27.5	58.9	29.9	56.3	64.4	64.0
	November	28.5	70.9	31.7	58.7	66.8	66.6
	December	32.6	74.5	35.8	60.3	67.2	67.4
1975	January	29.8	104.0	35.2	67.6	71.1	71.4
	February	29.5	105.8	35.2	70.1	74.1	74.4
	March	31.6	102.5	37.0	70.4	77.8	77.9
	April	32.9	102.8	38.3	71.1	82.3	81.9
	May	34.7	100.6	39.8	71.1	83.7	82.8
	June	35.3	98.3	40.2	72.2	85.2	84.0
	July	36.9	101.1	41.8	73.9	84.7	83.6
	August	35.5	141.0	43.3	73.4	85.6	84.3
	September	36.5	141.2	44.5	72.8	85.9	84.6
	October	36.1	140.1	44.3	77.2	86.1	85.6
	November	36.5	162.5	46.7	77.8	86.9	86.6
	December	35.9	161.8	46.0	81.1	79.6	80.1
1976	January	38.6	164.0	48.6	87.5	88.7	89.2
	February	39.5	165.3	49.5	87.7	92.3	92.7
	March	39.5	164.5	49.7	86.4	89.8	90.2
	April	40.6	164.3	51.2	88.6	100.2	99.7

*Represents direct sales by pipelines to industrial users. Does not include sales to industrial users by resellers.
**Includes the cost of gas to the distributing utility at entrance of distribution system or point of receipt.
Source: Federal Power Commission.

Average Retail Prices for Natural Gas Sold to Residential Customers for Heating Use

		Price
		Cents per thousand cubic feet
1974	January	113.3
	February	115.2
	March	116.9
	April	118.2
	May	119.9
	June	120.3
	July	122.0
	August	124.2
	September	125.6
	October	127.4
	November	131.4
	December	134.2
1975	January	137.9
	February	141.3
	March	142.7
	April	147.1
	May	150.1
	June	152.1
	July	151.1
	August	151.8
	September	155.7
	October	156.3
	November	162.3
	December	166.2
1976	January	167.4
	February	171.1
	March	172.9
	April	174.2
	May	176.6
	June	178.9
	July	180.2
	August	181.5

Source: Bureau of Labor Statistics.

Utility Fossil Fuels

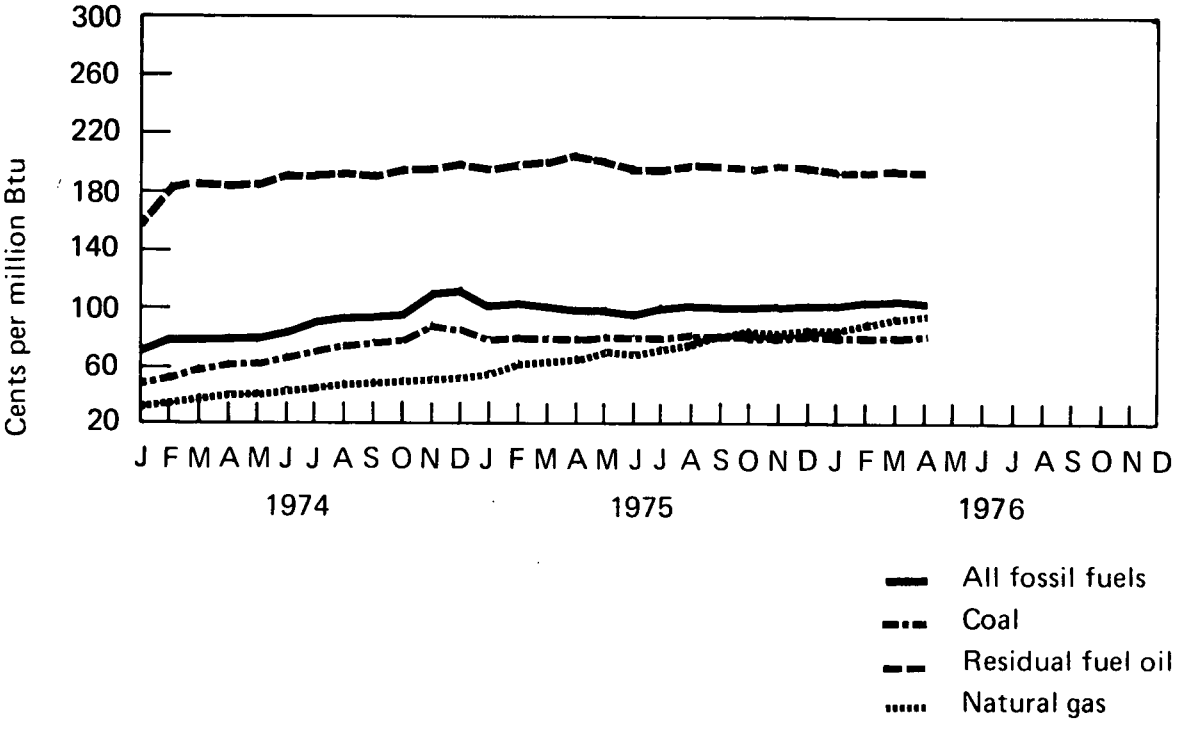
COST OF FOSSIL FUELS DELIVERED TO STEAM ELECTRIC UTILITY PLANTS

All Fossil Fuels*

Cents per million Btu	1975										1976		
Region	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
New England	196.3	190.5	192.7	189.5	188.0	182.9	182.3	181.2	177.6	181.3	184.6	182.3	184.3
Middle Atlantic	138.3	138.5	140.4	154.5	144.5	132.7	133.7	140.8	140.8	143.6	142.2	136.8	136.9
East North Central	86.6	87.4	87.5	89.2	90.1	88.2	87.0	89.5	92.6	89.9	90.0	88.3	91.3
West North Central	64.5	60.3	62.8	63.0	62.7	63.9	62.6	62.5	65.7	72.7	67.4	67.5	67.2
South Atlantic	120.4	120.1	122.5	126.8	125.2	124.4	118.4	117.0	121.3	122.0	122.7	118.3	119.2
East South Central	83.0	84.8	85.3	86.2	84.5	85.2	83.8	84.5	85.5	88.5	88.0	87.4	90.4
West South Central	70.0	72.9	71.2	76.0	77.5	79.1	79.6	77.0	82.8	88.0	88.2	91.7	93.5
Mountain	51.7	52.1	50.9	51.8	50.4	55.0	50.1	52.3	55.6	50.4	48.3	58.4	56.1
Pacific	209.7	187.3	154.5	147.1	171.3	174.5	177.2	206.6	222.7	214.0	206.5	211.3	196.2
NATIONAL AVG.	**101.5**	**101.0**	**99.3**	**102.5**	**103.8**	**103.7**	**101.2**	**102.4**	**106.9**	**107.3**	**107.6**	**107.8**	**106.4**

*See Explanatory Note 16.

National Average



Coal

Cents per million Btu	1975									1976			
Region	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
New England	135.4	125.7	116.5	119.2	127.3	120.4	128.7	127.6	120.8	124.2	122.7	119.4	124.8
Middle Atlantic	98.2	101.7	101.6	105.5	103.8	98.6	101.8	106.1	104.0	102.8	103.4	101.7	100.2
East North Central	80.4	82.0	82.4	82.3	84.3	83.4	82.1	83.8	85.7	83.1	83.1	82.7	85.0
West North Central	60.9	57.7	58.9	60.8	60.7	61.3	61.2	60.6	58.2	59.2	60.2	62.3	64.1
South Atlantic	100.8	98.8	98.4	101.6	101.4	102.4	98.6	98.5	100.1	98.3	99.2	99.7	100.8
East South Central	80.1	81.5	80.5	79.5	79.1	80.8	80.7	82.3	81.9	83.9	83.5	82.6	83.4
West South Central	21.0	21.0	21.0	24.0	24.0	24.0	24.0	24.0	24.0	26.4	26.4	26.4	26.4
Mountain	30.3	31.1	31.0	33.1	32.2	32.8	31.7	33.5	36.1	34.1	33.0	42.4	34.6
Pacific	56.8	57.0	58.4	58.2	58.8	58.9	58.4	59.5	58.9	72.7	76.0	74.5	75.5
NATIONAL AVG.	**80.5**	**81.8**	**81.4**	**80.8**	**82.1**	**82.1**	**81.5**	**81.7**	**82.2**	**80.2**	**81.4**	**83.3**	**83.7**

Residual Fuel Oil*

Cents per million Btu	1975									1976			
Region	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
New England	202.9	200.1	201.7	196.3	192.6	187.9	184.1	184.8	181.0	182.5	185.4	183.5	185.7
Middle Atlantic	203.3	200.1	201.5	200.4	199.3	191.2	192.2	191.5	191.6	191.3	179.9	191.8	197.1
East North Central	183.1	157.0	168.3	185.2	191.7	205.9	189.7	211.4	192.4	197.0	193.4	200.9	198.4
West North Central	167.8	163.9	165.5	161.1	157.5	150.3	153.5	161.6	157.1	173.1	162.2	153.4	153.0
South Atlantic	188.9	187.7	189.3	185.4	183.8	181.5	180.7	179.8	173.0	174.6	177.5	178.6	179.6
East South Central	159.7	161.0	165.5	167.8	175.0	174.4	175.5	180.4	171.4	172.8	173.7	174.3	176.0
West South Central	191.5	177.7	182.0	186.2	185.2	174.4	168.4	189.2	187.9	195.3	190.7	183.0	187.4
Mountain	206.0	198.0	199.0	209.1	221.3	223.7	210.3	195.8	202.3	206.8	203.5	205.0	220.8
Pacific	261.1	260.6	245.6	253.8	258.1	257.9	255.5	261.9	259.7	246.6	240.7	240.3	232.7
NATIONAL AVG.	**209.3**	**205.6**	**200.0**	**198.9**	**200.8**	**200.5**	**197.0**	**200.5**	**198.1**	**194.1**	**195.4**	**197.7**	**196.7**

Natural Gas**

Cents per million Btu	1975									1976			
Region	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR
New England	112.4	110.8	121.7	122.1	154.1	137.7	135.6	133.8	157.7	166.1	166.1	151.6	134.5
Middle Atlantic	101.7	98.3	92.7	91.2	87.6	87.6	90.5	103.1	105.0	107.8	195.8	106.3	150.3
East North Central	105.5	120.8	111.6	103.4	104.6	114.0	120.2	128.3	136.8	126.8	124.4	125.0	127.7
West North Central	54.5	58.6	58.1	59.2	56.9	57.8	55.4	55.8	55.9	56.1	61.6	61.5	68.0
South Atlantic	70.2	71.2	72.2	68.9	69.7	76.4	79.6	78.5	80.8	75.1	82.0	75.5	78.2
East South Central	82.7	76.4	77.0	91.0	95.9	110.3	105.5	120.2	146.6	156.6	157.4	147.5	148.0
West South Central	67.0	71.3	69.2	72.7	75.7	77.9	79.7	77.6	80.3	83.5	87.3	90.8	92.3
Mountain	67.4	68.1	69.6	71.8	71.1	78.6	82.0	86.2	90.4	86.2	85.5	87.4	90.4
Pacific	90.1	82.4	84.1	89.7	111.1	115.2	122.4	136.9	151.1	141.2	151.6	149.5	152.6
NATIONAL AVG.	**68.9**	**72.6**	**71.3**	**74.8**	**79.1**	**83.8**	**85.5**	**83.5**	**86.1**	**86.5**	**92.1**	**94.9**	**97.4**

*See Explanatory Note 16.
**Includes small quantities of coke oven gas, refinery gas, and blast furnace gas.
Source: Federal Power Commission.

Utility Fossil Fuels (Continued)

U.S. Average Delivered Prices of Coal at Utilities

		Contract	Spot
		In dollars per short ton	
1974	January	9.83	17.02
	February	10.40	20.57
	March	10.63	22.54
	April	11.28	23.70
	May	11.80	24.21
	June	11.87	25.84
	July	12.05	27.99
	August	12.50	28.87
	September	12.89	30.64
	October	13.30	30.67
	November	14.16	31.95
	December	14.20	31.05
1975	January	14.57	28.12
	February	15.71	25.93
	March	15.68	25.02
	April	15.88	24.52
	May	16.45	23.78
	June	16.40	23.36
	July	16.06	22.35
	August	16.65	22.39
	September	16.76	22.46
	October	16.72	22.52
	November	16.79	22.50
	December	16.90	22.40
1976	January	16.53	21.75
	February	17.04	21.23
	March	17.65	21.36
	April	17.76	21.43

Source: Federal Power Commission.

Petroleum Consumption

Petroleum consumption has increased during 1976 in almost all of the major consuming nations belonging to the International Energy Agency (IEA). Petroleum consumption in France[1] for the first 7 months of the year was 8.2 percent greater than the consumption level for the same period in 1975. Consumption for the January through May period in Japan and West Germany was up 7.2 percent and 6.9 percent, respectively. Canada and Italy posted increases of 1.5 percent and 0.2 percent, respectively, during the first half of the year. The United Kingdom was the only major country to show a drop in petroleum consumption (2.6 percent less than during the January through May period of 1975).

Crude Oil Production

Total world crude oil production in July dropped 450,000 barrels per day below the June level to 56.44 million barrels per day, mainly because of production cutbacks in Iran (from 6.10 million barrels per day to 5.58 million) and Iraq (from 2.00 to 1.80 million barrels per day). Production in Saudi Arabia, on the other hand, increased from 8.53 million barrels per day to 8.98 million. Adjustments in other countries were minor. Arab member nations accounted for 60.5 percent of production by the Organization of Petroleum Exporting Countries and for 32.1 percent of total world production.

[1] Not a member of IEA.

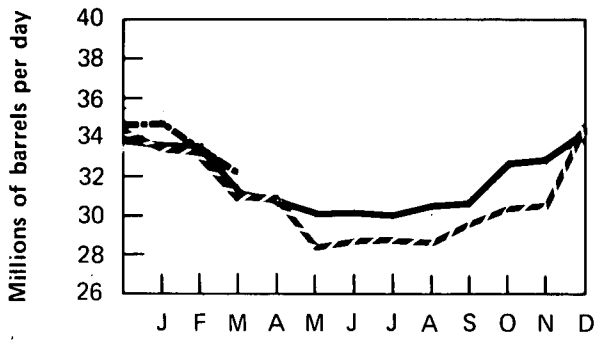
Petroleum Consumption

Petroleum Consumption for Major Free World Industrialized Countries

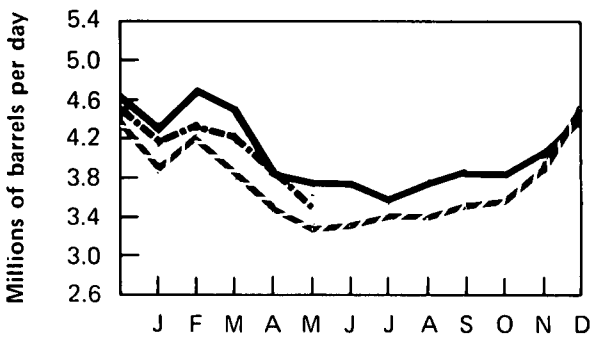
		Total IEA*	Japan**	West Germany	France***	United Kingdom	Canada	Italy†	Other IEA††
		Thousands of barrels per day							
1974	Jan	33,700	4,273	2,556	2,523	2,045	1,823	1,755	3,978
	Feb	33,700	R4,709	1,969	2,389	2,127	1,863	1,760	3,902
	Mar	31,200	4,508	2,173	2,249	2,133	R1,659	1,579	3,504
	Apr	30,600	R3,805	2,539	1,970	1,899	1,560	1,421	3,458
	May	30,000	3,718	2,403	1,915	1,704	R1,577	1,349	3,534
	June	30,100	3,710	2,414	2,103	1,545	1,455	1,314	3,486
	July	30,000	R3,574	2,548	1,703	1,531	1,534	1,368	3,445
	Aug	30,600	3,787	2,476	1,506	1,513	1,463	1,287	3,528
	Sept	30,700	3,868	2,473	1,996	1,663	R1,415	1,527	3,761
	Oct	32,800	3,843	2,613	2,045	2,049	1,680	1,569	4,021
	Nov	33,000	R4,075	2,432	2,260	2,108	R1,714	1,580	3,877
	Dec	34,300	4,401	2,261	2,492	1,983	1,831	1,753	4,074
	AVG.	**31,775**	**4,019**	**2,408**	**2,094**	**1,857**	**1,630**	**1,521**	**3,711**
1975	Jan	33,600	3,850	2,183	2,190	1,981	1,691	1,792	3,942
	Feb	33,600	4,242	2,455	2,243	1,906	R1,872	1,767	4,000
	Mar	31,000	3,978	2,234	1,952	1,731	1,558	1,558	3,455
	Apr	30,800	3,448	2,431	2,202	1,826	1,592	1,530	3,762
	May	28,200	3,296	2,253	1,640	1,482	1,474	1,174	2,827
	June	28,800	3,325	2,106	1,642	1,414	1,550	1,289	3,438
	July	28,900	3,437	2,319	1,491	1,322	R1,537	1,234	3,182
	Aug	28,700	3,397	2,360	1,300	1,208	R1,444	1,105	3,381
	Sept	29,800	R3,569	2,309	1,785	1,502	R1,474	1,465	3,537
	Oct	30,500	3,584	2,328	1,914	1,704	R1,550	1,679	3,680
	Nov	30,600	3,940	2,361	2,074	1,723	R1,577	1,448	3,594
	Dec	34,600	4,519	2,502	2,653	1,821	1,855	1,600	4,343
	AVG.	**30,745**	**3,712**	**2,319**	**1,921**	**1,613**	**1,593**	**1,468**	**3,592**
1976	Jan	34,700	4,143	2,459	2,449	1,707	1,748	1,748	4,351
	Feb	33,400	4,382	2,490	2,484	1,896	1,730	1,713	3,949
	Mar	32,300	R4,286	2,742	2,370	R1,907	1,788	1,621	2,982
	Apr	NA	R3,850	2,332	R2,107	1,744	1,512	1,409	NA
	May	NA	R3,489	2,314	R1,789	1,440	1,532	1,238	NA
	June	NA	NA	NA	1,622	NA	1,550	1,380	NA
	July	NA	NA	NA	1,618	NA	NA	NA	NA
	AVG. (Year to date)	**33,468**	**4,027**	**2,468**	**2,061**	**1,737**	**1,644**	**1,518**	**3,757**

Note: All recent figures are estimates.
*The 19 signatory nations of the International Energy Agency (IEA) are: Austria, Belgium, Canada, Denmark, Federal Republic of Germany, Greece, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, Turkey, United Kingdom, and United States. Except for the United States, inland consumption excludes bunkers, refinery fuel, and losses.
**Excludes liquefied petroleum gases and condensates. ***Not a member of IEA. †Principal products only. ††Excludes the United States. NA=Not available. R=Revised data. Source: Central Intelligence Agency.

Total IEA



Japan*



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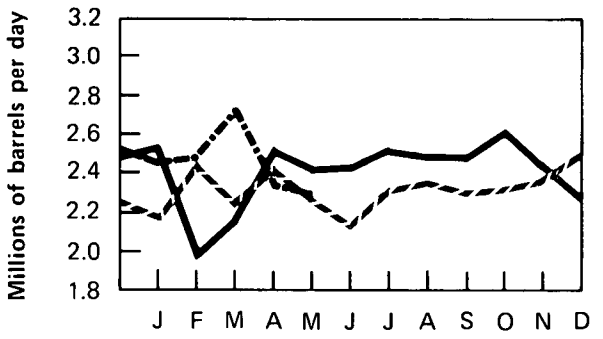

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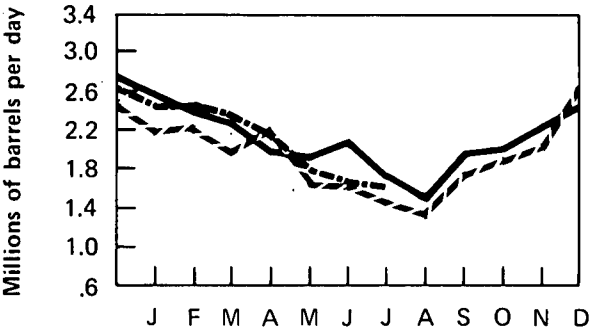
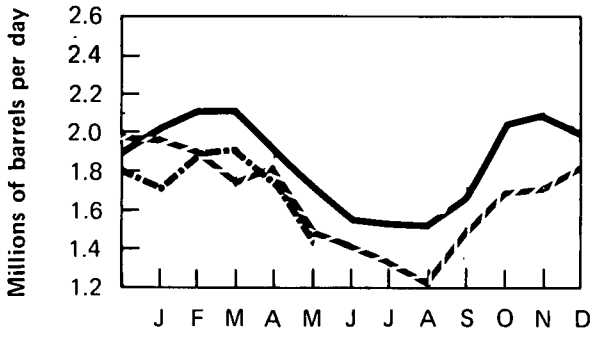
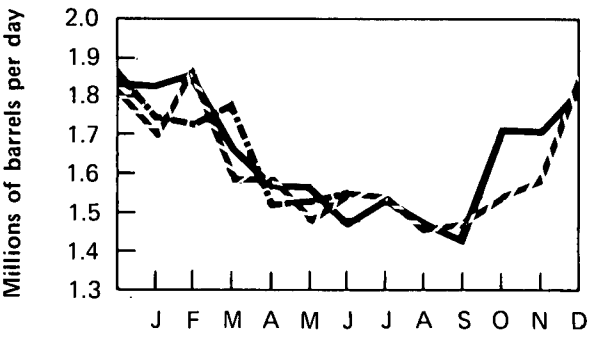


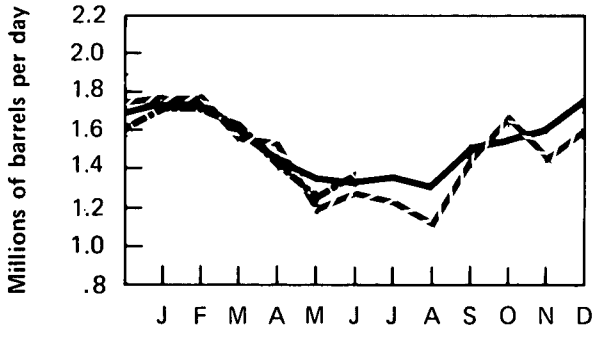
United Kingdom



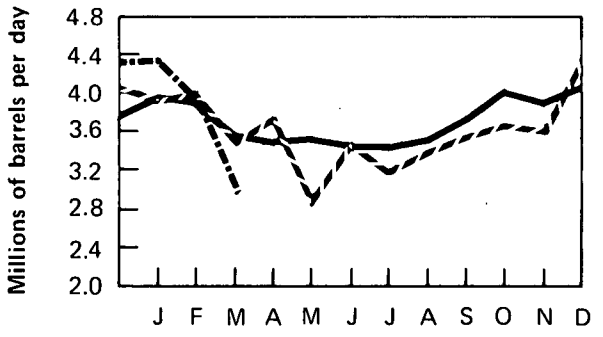
Canada



Italy***



Other IEA†



*Excludes liquefied petroleum gases and condensates.
**Not a member of IEA.
***Principal products only.
†Excludes the United States.

1974
1975
1976

Crude Oil Production

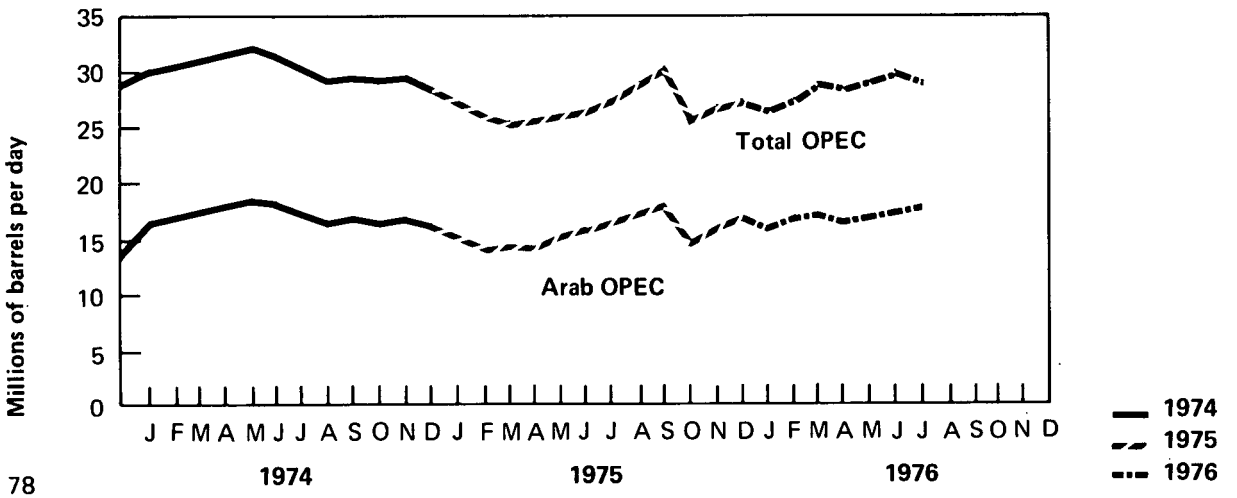
Crude Oil Production for Major Petroleum Exporting Countries – July 1976

Country	Production				Production Capacity	Production Shut in
	1973	1974	1975	1976 July**	July	July
	Thousands of barrels per day					Percent
Algeria	1,070	960	930	1,000	1,000	0
Iraq	2,015	1,975	2,250	1,800	3,000	40.0
Kuwait*	3,020	2,545	2,100	1,860	3,500	46.9
Libya	2,175	1,520	1,520	2,030	2,500	18.8
Qatar	570	520	440	490	700	30.0
Saudi Arabia*	7,600	8,480	7,080	8,980	11,500	21.9
United Arab Emirates	1,530	1,680	1,700	1,940	2,380	18.5
Subtotal: Arab OPEC	**17,980**	**17,680**	**16,020**	**18,100**	**24,580**	**26.4**
Ecuador	210	175	160	110	200	***45.0
Gabon	150	200	220	220	250	12.0
Indonesia	1,340	1,375	1,310	1,500	1,700	11.8
Iran	5,860	6,020	5,350	5,580	6,500	14.2
Nigeria	2,055	2,255	1,790	2,050	2,500	18.0
Venezuela	3,365	2,975	2,350	2,370	2,700	12.2
Subtotal: Non-Arab OPEC	**12,980**	**13,000**	**11,180**	**11,830**	**13,850**	**14.6**
Total: OPEC	**30,960**	**30,680**	**27,200**	**29,930**	**38,430**	**22.1**
Canada	1,800	1,695	1,470	1,386	1,800	23.0
Mexico	465	580	720	850	850	0
Total: OPEC, Canada Mexico	**33,225**	**32,955**	**29,390**	**32,166**	**41,080**	**21.7**
Total World	**55,740**	**55,885**	**53,170**	**56,440**		

*Includes about one-half of Neutral Zone production which amounted to approximately 460,000 barrels per day in July. **Estimated. ***Production drop caused by pipeline failure.

Sources: Central Intelligence Agency and National Energy Board of Canada.

OPEC Countries Crude Oil Production



Definitions

Base Production Control Level

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold from a particular property in the same month of 1972. If domestic crude oil was not produced and sold from that property in every month of 1972, the total number of barrels of domestic crude oil produced and sold from that property in 1972, divided by 12.

2. Effective February 1, 1976: the total number of barrels of old crude oil produced and sold from the property during calendar year 1975, divided by 365, and multiplied by the number of days in the particular month during 1975. A producer may elect to use the total number of barrels of crude oil produced and sold from the property during calendar year 1972, divided by 366, and multiplied by the number of days in the particular month during 1972.

Branded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products pursuant to (1) an agreement or contract with a refiner (or a firm which controls, is controlled by, or is under common control with such refiner) to use a trademark, trade name, service mark, or other identifying symbol or name owned by such refiner (or any such firm), or (2) an agreement or contract under which any such firm engaged in the marketing or distribution of refined petroleum products is granted authority to occupy premises owned, leased, or in any way controlled by a refiner (or firm which controls, is controlled by, or is under common control with such refiner), but which is not affiliated with, controlled by, or under common control with any refiner (other than by means of a supply contract, or an agreement or contract described in parts (1) or (2) of this definition), and which does not control such refiner.

Ceiling Price

The maximum permissible selling price, prior to February 1, 1976, for a particular grade of domestic crude oil in a particular field is the May 15, 1973, posted price plus $1.35 per barrel.

Controlled Crude Oil

Crude oil that was domestically produced prior to February 1, 1976, subject to the ceiling price for crude oil. For a particular property which is not a stripper well lease, the volume of controlled oil equals the base production control level minus an amount of released oil equal to the new oil production from that property.

Crude Oil Domestic Production

The volume of crude oil flowing out of the ground. Domestic production is measured at the wellhead and includes lease condensate, which is a natural gas liquid recovered from lease separators or field facilities.

Crude Oil Imports

The monthly volume of crude oil imported which is reported by receiving refineries, including crude oil entering the U.S. through pipelines from Canada.

Crude Oil Input to Refineries

Total crude oil used as input for the refining process, less crude oil lost or used for refinery fuel.

Crude Oil Stocks

Stocks held at refineries and at pipeline terminals.

Cumulative Deficiency

A measure of the cumulative deficit of production below the base production control level after the first month in which new oil was produced and sold from a specific property.

Dealer Tankwagon (DTW) Price

The price at which a dealer purchases gasoline from a distributor or a jobber.

Distillate Fuel Oil

The lighter fuel oils distilled off during the refining process. Included are products known as ASTM grades Nos. 1 and 2 heating oils, diesel fuels, and No. 4 fuel oil. The major uses of distillate fuel oils include heating, fuel for on- and off-highway diesel engines, and railroad diesel fuel. Minor quantities of distillate fuel oils produced and/or held as stocks at natural gas processing plants are not included in this series.

Domestic Demand for Refined Petroleum Products

A calculated value, computed as domestic production plus net imports (imports less exports), less the net increase in primary stocks. It, therefore, represents the total disappearance of refined products from primary supplies.

Electricity Production

Production at electric utilities only. Does not include industrial electricity generation.

Entitlement Position

The monthly entitlement position of a refiner indicates whether he bought or sold entitlements in that month.

An entitlement is the right to process "deemed old oil," which is the sum of a refiner's receipts of "old" oil and a fraction of his receipts of "upper tier" crude oil. This fraction is set monthly by FEA. A refiner must purchase entitlements for the amount of his "deemed old oil" receipts in excess of the national domestic crude oil supply ratio (NDCOSR). The NDCOSR, as calculated by FEA, reflects the differences in costs to refiners of "old" oil, "upper tier" crude oil, and imported crude oil.

Entitlement Price

The price of an entitlement, fixed by FEA, is the exact differential as reported for the month between the weighted average cost per barrel to refiners of "old" oil and of imported crude oil, less 21 cents, such cost to be equivalent to the delivered cost to the refinery.

Firm Natural Gas Service

High priority gas service in which the pipeline company is under contract to deliver a specified volume of gas to the customer on a non-interruptible basis. Residential and small commercial facilities usually fall into this category.

Interruptible Natural Gas Service

Low priority gas service in which the pipeline company has the contractual option to temporarily terminate deliveries to customers by reason of claim of firm service customers or higher priority users. Large commercial facilities, industrial users, and electric utilities usually fall into this category.

Jet Fuel

Includes both naphtha-type and kerosene-type fuels meeting standards for use in aircraft turbine engines. Although most jet fuel is used in aircraft, some is used for other purposes, such as for generating electricity in gas turbines.

Jobber

A petroleum distributor who purchases refined product from a refiner or terminal operator for the purpose of reselling to retail outlets and commercial accounts or for the purpose of retailing through his own retail outlets.

Jobber Margin

The difference between the price at which a jobber purchases refined product from a refiner or terminal operator and the price at which the jobber sells to retail outlets. This does not reflect margins obtained by jobbers through retail sales or commercial accounts.

Jobber Price

The price at which a petroleum jobber purchases refined product from a refiner or terminal operator.

Landed Cost

The cost of imported crude oil equal to actual cost of crude at point of origin plus transportation cost to the United States.

Limited Work Authorization

A Limited Work Authorization (LWA) may be granted by the Atomic Safety and Licensing Board of the Nuclear Regulatory Commission to an applicant who wants to construct a nuclear powerplant providing that the project has been cleared for all requirements of the National Environmental Protection Act and that the geologic and topographic suitability of the reactor site has been found satisfactory. The LWA allows an applicant to proceed with site excavation, install temporary construction and service facilities, construct service roads, and erect structures and components not subject to normal quality assurance inspections. It may save a utility from 6 to 8 months in total construction time. However, because the ultimate approval of a construction permit is based on all evidence revealed during the licensing hearings, the successful award of an LWA is no guarantee that a construction permit will also be granted.

Line Miles of Seismic Exploration

The distance along the earth's surface that is covered by seismic traverses.

Lower Tier Crude Oil

Old crude oil.

Lower Tier Ceiling Price Determination

The lower tier ceiling price for a particular grade of domestic crude oil in a particular field is the sum of (1) the highest posted price at 6 a.m., local time, May 15, 1973, for transactions in that grade of crude oil in that field; or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; and (2) $1.35 per barrel.

Major Brand

Lundberg Survey, Inc., defines major brand as an integrated company that produces, refines, transports, and markets in Interstate Commerce under its own brand(s) in 20 or more States.

Motor Gasoline Production

Total production of motor gasoline by refineries, measured at refinery outlet. Relatively small quantities of motor gasoline are produced at natural gas processing plants, but these quantities are not included.

Motor Gasoline Stocks

Primary motor gasoline stocks held by gasoline producers. Stocks at natural gas processing plants are not included.

Natural Gas Liquids (NGL)

Products obtained from natural gasoline plants, cycling plants, and fractionators after processing the natural gas. Included are ethane, liquefied petroleum (LP) gases (propane, butane, and propane-butane mixtures), natural gasoline, plant condensate, and minor quantities of finished products such as gasoline, special naphthas, jet fuel, kerosene, and distillate fuel oil.

New Crude Oil

1. Prior to February 1, 1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the base production control for that month and less the current cumulative deficiency.

2. Effective February 1,1976: the total number of barrels of domestic crude oil produced and sold in a specific month, less the property's base production control level for that month and less the current cumulative deficiency since February 1, 1976.

Nonbranded Independent Marketer

A firm which is engaged in the marketing or distribution of refined petroleum products, but which (1) is not a refiner, (2) is not a firm which controls, is controlled by, is under common control with, or is affiliated with a refiner (other than by means of a supply contract), and (3) is not a branded independent marketer.

Old Crude Oil

1. Prior to February 1, 1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month and less the total number of barrels of released crude oil for that property in that month.

2. Effective February 1,1976: the total number of barrels of crude oil produced and sold from a property in a specific month, less the total number of barrels of new crude oil for that property in that month.

Power Ascension Nuclear Powerplant

A nuclear powerplant that has been licensed by the Nuclear Regulatory Commission to operate, but which is in the initial testing phase during which production of electricity may not be continuous. In general, when the electric utility is satisfied with the plant's performance, it formally accepts the plant from the manufacturer, and places it in "commercial operation" status. A request is then submitted to the appropriate utility rate commission to include the powerplant in the rate base calculation.

Primary Stocks of Refined Petroleum Products

Stocks held at refineries, bulk terminals, and pipelines. They do not include stocks held in secondary storage facilities, such as those held by jobbers, dealers, independent marketers, and consumers.

Property

Property means the right to produce domestic crude oil, which arises from a lease or from a fee interest.

Refined Petroleum Products Imports

Imports (into the 50 States and the District of Columbia) of motor gasoline, naphtha-type jet fuel, kerosene-type jet fuel, kerosene, distillate fuel oil, residual fuel oil, liquefied petroleum gases, petrochemical feedstocks, special naphtha, lubricants, waxes, asphalt, natural gas, plant condensate, and unfinished oils. Included are imports of fuels into bonded storage and receipts from U.S. territories.

Refiner Acquisition Cost

The cost to the refiner, including transportation and fees, of crude petroleum. The composite cost is the average of domestic and imported crude costs and represents the amount of crude cost which refiners may pass on to their customers.

Released Crude Oil

An amount of crude oil produced from a property in a particular month prior to February 1, 1976, which is equal to the total number of barrels of new crude oil produced and sold from that property in that month. The amount of released crude oil for a property in a particular month shall not exceed the base production control level for that property in that month.

Residual Fuel Oil

The heavier oils that remain after the distillate fuel oils and lighter hydrocarbons are boiled off in refinery operations. Included are products known as ASTM grades Nos. 5 and 6 oil, heavy diesel oil, Navy Special Oil, Bunker C oil, and acid sludge and pitch used as refinery fuels. Residual fuel oil is used for the production of electric power, for heating, and for various industrial purposes.

Rotary Rig

Machine used for drilling wells that employs a rotating tube attached to a bit for boring holes through rock.

Separative Work Unit (SWU)

The measure of work required to produce enriched uranium from natural uranium. Enrichment plants separate natural uranium feed material into two groups, an enriched product group with a higher percentage of U-235 than the feed material and a depleted tails group with a lower percentage of U-235 than the feed material. To produce 1 kilogram of enriched uranium containing 2.8 percent U-235, and a depleted tails assay containing 0.3 percent U-235, it requires 6 kilograms of natural uranium feed and 3 kilograms of separative work units (3 SWU).

Stripper Well Lease

A property whose average daily production of crude oil (excluding condensate recovered in nonassociated production) per well did not exceed 10 barrels per day during any preceding calendar year beginning after December 31, 1972.

Synthetic Natural Gas (SNG)

A product resulting from the manufacture, conversion, or reforming of petroleum hydrocarbons which may be easily substituted for or interchanged with pipeline quality natural gas.

Uncontrolled Crude Oil

That portion of domestic crude oil production including new, released, and stripper oil which, before February 1, 1976, could be sold at a price exceeding the ceiling price.

Unrecouped Costs

Costs which have not been recovered in the current month's product prices but which have been "banked" for later use.

Upper Tier Crude Oil

New crude oil and crude oil produced from a stripper well lease.

Upper Tier Ceiling Price Determination

The upper tier ceiling price for a particular grade of domestic crude oil in a particular field is (1) the highest posted price on September 30, 1975, for transactions in that grade of crude oil in that field in September 1975, or if there was no posted price in that field for that grade of domestic crude oil, the related price for that grade of domestic crude oil which is most similar in kind and quality in the nearest field for which prices were posted; less (2) $1.32 per barrel.

Well

Hole drilled for the purpose of finding or producing crude oil or natural gas or providing services related to the production of crude oil or natural gas. Wells are classified as oil wells, gas wells, dry holes, stratigraphic tests, or service wells. This is a standard definition of the American Petroleum Institute.

Explanatory Notes

1. Domestic production of energy includes production of crude oil and lease condensate, natural gas (wet), and coal (anthracite, bituminous, and lignite), as well as electricity output from hydroelectric and nuclear powerplants and industrial hydroelectric power production. The volumetric data were converted to approximate heat contents (Btu-values) of the various energy sources using conversion factors listed in the Units of Measure.

2. U.S. imports of fossil fuels include imports of crude oil, refined petroleum products, and natural gas (dry).

3. Domestic consumption of energy includes domestic demand for refined petroleum products, consumption of coal (anthracite, bituminous, and lignite) and natural gas (dry), electricity output from hydroelectric and nuclear powerplants, industrial hydroelectric power production, and net imports of electric power. Approximate heat contents (Btu-values) were derived using conversion factors listed in the Units of Measure. Electricity imports were converted using the Btu-content of hydroelectric power. 1975 and 1976 electricity imports were estimated on the basis of imports levels during 1974.

4. Domestic demand figures for natural gas liquids (NGL) as reported by BOM and reproduced in this publication do not include amounts utilized by refineries for blending purposes in the production of finished products, principally gasoline. Use of NGL at refineries is reported in a separate column. The production series cited in this publication shows both NGL produced at processing plants and liquefied gases produced at refineries. NGL produced at refineries is extracted from crude oil and hence, to avoid double counting, should not be included in calculations of total U.S. production of petroleum liquids. The NGL stock series shown in this volume includes liquids held as stocks at both natural gas processing plants and at refineries.

5. The petroleum short-term demand forecasting model uses historical consumption data to construct a regression equation for each of eight major petroleum products. Each equation attempts to capture the relationship between final demand for that product and the factors influencing that demand. The explanatory factors used in predicting product demand include (1) macroeconomic variables such as disposable personal income and gross national product (GNP), (2) real product prices, (3) variables representing the effects of weather and other seasonal variations in demand, and (4) other factors relevant to a particular product.

The assumptions underlying the current short-term forecast are:

1. Normal weather.
2. Real GNP growth rate of 6.5 percent for 1976.
3. Implementation of the Energy Policy and Conservation Act and the Energy Conservation and Production Act; specifically, the composite price of domestic crude oil is set at $7.66 per barrel beginning February 1976. This price ceiling is permitted to rise at 10 percent per year. Furthermore, stripper oil and tertiary oil is not controlled.
4. Elimination of the $2-per barrel crude oil import fee beginning in January 1976.
5. The price of imported oil is assumed to be $13.40, $13.98, and $14.73 for the years 1976, 1977, and 1978, respectively.

The short-term projections are periodically revised to incorporate observed weather conditions and actual values of macroeconomic and other explanatory variables as they become available. This "revised forecast" is termed the "backcast." On page 47 in this issue of the *Monthly Energy Review,* the backcast is solved for December 1975.

The supply model includes an assumed level of domestic crude oil and NGL production and inventory changes. Imports are determined as the incremental supply required to meet total demand for refined products not satisfied by domestic production or inventory drawdown.

6. Domestic consumption of natural gas includes the quantities sold to consumers plus the gas used for plant and pipeline fuel, after the natural gas liquids have been extracted. All monthly consumption data are estimated.

Marketed production of natural gas includes gross withdrawals from the ground less the quantities used for repressuring and the amount vented and flared, before the natural gas liquids have been extracted.

7. The Federal Energy Administration and Federal Power Commission began the coordinated collection and compilation of monthly underground storage information from all underground storage operators in the United States in October 1975. Initial storage information reported was for the month of September 1975. Comparable monthly information for total U.S. storage operations is not available for prior periods.

The total gas in storage is the total volume of gas (base gas plus working gas) in storage reservoirs as of the end of the month. Base gas is the volume of gas, including all

native gas in place at the time of conversion to storage, needed as a permanent inventory to maintain adequate reservoir pressures and deliverability rates throughout the withdrawal season. Base gas includes the volumes which will not be recoverable upon termination of storage operations. Working gas is the volume of gas above the designated base gas level available for withdrawal.

8. Bituminous coal and lignite consumption as reported by the Bureau of Mines are derived from information provided by the Federal Power Commission, Department of Commerce, and reports from selected manufacturing industries and retailers. Domestic consumption data in this series, therefore, approximate actual consumption. This is in contrast to domestic demand reported for petroleum products, which is a calculated value representing total disappearance from primary supplies.

Bituminous coal and lignite production is calculated from the number of railroads cars loaded at mines, based on the assumption that approximately 60 percent of the coal produced is transported by rail. Production data are estimated by the Bureau of Mines from Association of American Railroads reports of carloadings.

9. Cooling degree-days can be used as a measurement of energy consumption by air-conditioning systems. Cooling degree-days are defined as deviations of the mean daily temperature at a sampling station above a base temperature equal to 65° F by convention. Mean daily temperature information is forwarded to the National Oceanic and Atmospheric Administration from approximately 200 weather stations around the country. These data are used to calculate statewide cooling degree-day averages based on the population of the area surrounding each weather station. The population-weighted State figures are aggregated into Petroleum Administration for Defense Districts and the national average, also using a population weighting scheme.

10. Quantities of uranium are measured by various units at different stages in the fuel cycle. At the mill, quantities are usually expressed as pounds or short tons of U_3O_8. After the conversion stage, the units of measure are either metric tons (MT) of UF_6 or metric tons of uranium (MTU). The latter designation expresses only the elemental uranium content of UF_6.

Following the enrichment stage, the same units are used, but the U-235 content has been enhanced at the expense of loss of material. At the fabrication stage, UF_6 is changed to UO_2, and the standard unit of measure is the MTU. We have chosen to present all uranium quantities as MTU; conversion factors to other units are given in the section on Units of Measure.

11. The units used to describe power generation at nuclear plants are all based on the watt, which is a unit of power. (Power is energy produced per unit of time.) As with fossil-fueled plants, nuclear plants have three design power ratings. The thermal rating (expressed in thermal megawatts) is the rate of heat production by the reactor core. The gross electrical rating (expressed in electrical megawatts, MWe) is the generator capacity at the stated thermal rating of the plant. The net electrical rating (also expressed in MWe) is the power available as input to the electrical grid after subtracting the power needed to operate the plant. (A typical nuclear plant needs 5 percent of its generated electricity for its own operation.)

The electrical energy produced by a plant is expressed either as megawatt hours (MWhe) or kilowatt hours (KWhe). Tables in the nuclear section show generated electricity as average electrical power. This enables a more direct comparison to design capacity and to previous months' performances. To obtain the quantity of electricity generated during a given time period (in megawatt hours), multiply the average power level (in megawatts) by the number of hours during that period.

The energy extracted from uranium fuel is expressed as thermal megawatt days per metric ton of uranium (MWD/MTU). The production of plutonium in the fuel rods is expressed as kilograms of plutonium per metric ton of discharged uranium (kg/MTU).

12. The Residential and Commercial Sector consists of housing units, non-manufacturing business establishments (e.g., wholesale and retail businesses), health and educational institutions, and government office buildings. The Industrial Sector is made up of construction, manufacturing, agriculture, and mining establishments.

The Transportation Sector consists of both private and public passenger and freight transportation, as well as government transportation, including military operations. The Electric Utilities Sector is made up of privately- and publicly-owned establishments which generate electricity primarily for resale.

13. Prior to January 1975, diesel fuel prices were obtained from retail gasoline dealers that also sold diesel fuel. Beginning in January 1975, the diesel fuel survey was expanded to include selected truck stops plus additional retail gasoline dealers that sold diesel fuel. Selling price estimates are based on a survey of 31 cities. Margins are based on a survey of 10 cities.

14. The domestic crude petroleum wellhead price represents the first sale price for crude oil and lease conden-

sates. The refiner acquisition cost of domestic crude petroleum is the price paid by refiners for domestic crude petroleum, unfinished oils, and natural gas liquids and includes transportation costs from the wellhead to the refinery.

15. The refiner acquisition cost of imported crude petroleum is the average landed cost of imported crude petroleum to the refiner and represents the amount which may be passed on to the consumer. It incorporates transportation costs and fees (including the supplemental import fees) and any other cost incurred in purchasing and shipping crude oil to the United States.

The estimated landed cost of imported crude petroleum from selected countries does not represent the total cost of all imported crude. Prior to March 1975, imported crude costs to U.S. company-owned refineries in the Caribbean were not included in the landed cost, and costs of crude petroleum from countries which export only small amounts to the United States were also excluded. Beginning in March 1975, however, coverage was expanded to include U.S. company-owned refineries in the Caribbean. Landed costs do not include supplemental fees.

16. The weighted average utility fuel cost for the total United States includes distillate fuel oil delivered to utilities whereas the regional breakdown for residual fuel oil prices represents only No. 6 fuel oil prices.

Units of Measure

Weight

1 metric ton	*contains*	1.102 short tons
1 long ton	*contains*	1.120 short tons

Conversion Factors for Crude Oil

Average gravity

1 barrel	*contains*	42 gallons
1 barrel	*weighs*	0.136 metric tons (0.150 short tons)
1 metric ton	*contains*	7.33 barrels
1 short ton	*contains*	6.65 barrels

Conversion Factors for Uranium

1 short ton (U_3O_8)	*contains*	0.769 metric tons of uranium
1 short ton (UF_6)	*contains*	0.613 metric tons of uranium
1 metric ton (UF_6)	*contains*	0.676 metric tons of uranium

Approximate Heat Content of Various Fuels

Petroleum	
Crude Oil	5.800 million Btu/barrel
Refined products	
Imports, average	6.000 million Btu/barrel
Consumption, average	5.5061 million Btu/barrel
Gasoline	5.248 million Btu/barrel
Jet Fuel, average	5.600 million Btu/barrel
Naphtha-type	5.355 million Btu/barrel
Kerosene-type	5.670 million Btu/barrel
Distillate fuel oil	5.825 million Btu/barrel
Residual fuel oil	6.287 million Btu/barrel
Natural gas liquids	4.024 million Btu/barrel
Natural gas	
Wet	1,097 Btu/cubic foot
Dry	1,024 Btu/cubic foot
Coal	
Bituminous and lignite	
Production	23.73 million Btu/short ton
Consumption	23.07 million Btu/short ton
Anthracite	25.40 million Btu/short ton

Electricity Conversion Heat Rates

Fossil fuel steam-electric	
Coal	10,176 Btu/kilowatt hour
Gas	10,733 Btu/kilowatt hour
Oil	10,826 Btu/kilowatt hour
Nuclear steam-electric	10,660 Btu/kilowatt hour
Hydroelectric	10,389 Btu/kilowatt hour
Electricity Consumption	3,412 Btu/kilowatt hour

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